vFILER 3.0
User Manual (Basic)

See "Advanced" Guide for Additional Functionality

Revised May 2006

I. <u>Prologue</u>

The most efficient way to use this manual is to first read Section II-Overview
By reading Section II, you will gain a general knowledge about how vFILER fits into the document management landscape. The next step should be to create the "Proof of Delivery" workflow discussed in Section III-How to use it. Upon completion of Section III, you will have a foundation on which you can build more advanced workflows.

The installation of vFILER includes sample workflows and sample data. Within the path of C:\Work area and demodata\Documentation is a pdf document "The Perfect Demo". Print and read the document. Run the four workflows described within the document and retrieve your documents after processing. Becoming very familiar with these workflows will allow you sell or use the product more effectively.
Note: You are encouraged to modify the sample workflows to your own specifications. The workflows and related data are stored in C:\Work area and demodata\vFILERDATA Backup and can be restored easily.

II. Overview

A.   vFILER

vFILER is a sophisticated document processing application.

vFILER is NOT a scanning solution. There are no TWAIN or ISIS scanner drivers nor scanning software included within vFILER. The manufacturers of scanners and Multi-Function Printers (MFP) provide the most optimized drivers and software for their own equipment. vFILER is device independent. vFILER can process virtually any image type; however, maximum image processing capability can best be performed on Group IV single or multi-page TIF documents.

The vFILER begins to work only AFTER an image has been created. That process is called Capture.

There are two methods to capture images. The first is Capture from Email. This process interfaces with MS Outlook and provides many features and options to capture attachments and text body of received emails. The other capture method is Capture from Folder. This process monitors a user-defined folder (hot folder) and sub folders to capture a variety of image types.

A workflow is defined as a series of user-defined steps used to process images into a repository for future retrieval.

A repository is defined as a central location of documents organized in specific ways to facilitate retrieval. vFILER is an imaging application designed for a production environment.

With features such as, Bar Code Recognition (1D and 2D), Zone or Full OCR, Indexer with database lookup, Metadata Writer, Forms Recognition, OMR and Publishing components, vFILER can process thousands of "validated" documents per workstation, per day.

The value proposition of vFILER is derived from its "open" architecture design. The leveraging of free or low cost technologies to perform sophisticated imaging functions provides significant value when compared to competing "locked-in" proprietary solutions. The features of vFILER can be best leveraged when the documents and the databases allow for complete operator unattended, validated workflows that save considerable time and labor expense.

vFILER is a desktop (workstation) indexing application that can update shared server files. The vFILER license is for the desktop only. The "unlimited users", client-based inquiry program (two methods) PDRwin is included with the desktop license for vFILER.

Note: vFILER can be installed on server platforms; however, it will run as an application, not as a service. Scalability can be best achieved by "load balancing" through the deployment of multiple indexing workstations.

The main function of vFILER is indexing. vFILER is "middleware" that resides within a Microsoft operating environment. Documents are captured from user defined Microsoft folders or Outlook email…documents are processed through user defined indexing processes (manual, semi-automatic or automatic)…and documents are published by vFILER to a user defined Microsoft repository (Explorer, Access, or ODBC compliant databases). vFILER is tightly integrated with Microsoft tools; such as, Outlook and Explorer. In addition, free software from Microsoft and Adobe, such as, Indexing Services, Windows

Explorer, and the free downloadable Adobe Reader and PDF iFilter are used in conjunction with vFILER.

B. Installation Planning

It is important to prepare for the implementation of a document management system. Review the documents that will be archived.

- What is the quality?

- Who uses them?

- How are the documents retrieved?

- How are they organized now?

- The most important factor to consider is: How will the documents be retrieved?

Knowing the criteria to retrieve the documents will dictate the required processes to design into workflows. The method of retrieval is also important. Some businesses are content with using Windows Explorer to browse through folders and files. Other businesses require a backend database with which to retrieve the documents. With vFILER, a user can select the preferred indexing technology and backend database. (Note: MS Indexing Services is a free, robust indexing system discussed later in this manual).

vFILER supports Indexing Services, Access and ODBC compliant backend databases. Other business users might prefer to use the cataloging feature of Adobe 5.0, 6.0 or 7.0 Professional in conjunction with the free Adobe Reader. (Section III, E) There are many considerations when planning a document management system. Plan ahead. Once the documents are scanned and archived, it is labor intensive to re-scan or re-organize the images!

C. Image formats

PDF is a preferred format, especially as the repository image format, due to its acceptance as a legal form. PDF documents are the defacto standard format used by the internet. PDF documents contain metadata which is updated by vFILER for retrieval purposes. Group III or IV single or multi-page TIF formats are preferred as the capture image because of advanced image processing capability. vFILER can convert the TIF images to a PDF image as a user defined component.

D. Metadata

Using the vFILER component Metadata Writer or Convert to PDF, indexing data are permanently stored within the document. Review the metadata contents of a PDF document by opening a PDF document and selecting: file>properties>summary. Metadata is defined as the contents of Subject, Title, Author and Keywords.

The metadata of a PDF document is one method vFILER uses to automatically store important "indexing" data for retrieval purposes. Note: Because the "indexing" data are stored within the document, if the "index" becomes corrupted, the "index" can be re-generated quickly and easily using MS Indexing Service.

In addition, vFILER contains a function called RESTORE which can read PDF metadata and automatically generate or re-generate the backend database in the event of corruption or lose. vFILER users can select a variety of methods to retrieve documents quickly and economically in a multi-user environment via client based or browser inquiry tools.

E.   Databases- Front-End and Back-End

A front end database is used to facilitate the "indexing" of data. Via the database lookup feature of vFILER, a workflow can be designed to validate against a database, extract related information, and update the retrieval indexes or backend databases.

Accounting systems usually can export to MS Access, MS Excel or have a direct ODBC compliant connection, which can then be used as a front end database for validation and extraction functions. Validation is important to insure the reliability of indexing data. In addition, the validation and extraction of related data can be used to create automated workflows precluding the need of manual indexing.

A backend database, MS Access or ODBC compliant, can be used by vFILER to store the retrieval "keys" and the path to the images. Advanced backend databases can be used by vFILER including MSDE, MS SQL, IBM DB2, etc. PDRwin is an unlimited client desktop retrieval program, included with vFILER, used to access images from the Access or ODBC compliant backend databases or Indexing Services.

F.   vFILER-Operational Considerations.

Workflows are designed within vFILER to capture, process, publish and retrieve virtually any document type. A user must define the source of the images for the capture component (folder or email). A user must define the various processing steps required, with an emphasis on "indexing". A user must define how the images are to be processed into the repository. A user must define the method of retrieval.

Many processing functions are dependent on the quality and type of document to be processed. For example, a dot matrix document may not be suitable for a Zone OCR process or bar code recognition. A complete analysis of each document, for each application, is required to determine what processes can be automated.

Workflows are created based upon the type of document that is being processed, (e.g., credit applications or proof of delivery). The workflow designer should name the workflows accordingly. Following the "designing" of a workflow, by selecting Design, a user can process a single workflow or multiple workflows simultaneously.
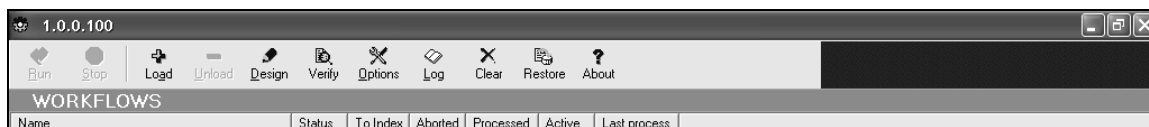
- Use the RUN button to begin the vFILER process.

- Use the STOP button to end a vFILER process.

- Use the LOAD button to include the selected workflow into the vFILER process.

- Use the UNLOAD button to remove the selected workflow from the vFILER process.

- Use the DESIGN button to create or modify workflows.

- Use the VERIFY button to test the logic and setup of a workflow.

- Use the OPTIONS button to customize run time processes.

- Use the LOG button to audit a vFILER process.

- Use the CLEAR button to clear folder cache, email cache and unprocessed jobs.

   Note: Use the design mode setting in Capture from Folder for demonstration   and design purposes. The "captured" images will

NOT be deleted. To process sample images again, use the CLEAR button (folder or email cache option). The password for clearing unprocessed jobs (work in process) is CLEARJOBS.

Use the RESTORE button to generate or re-generate a backend database from the metadata of PDF documents.

Use the ABOUT button to view the number of launches and images to process that are remaining for the evaluation period.

By properly planning the imaging project, taking into consideration the types of documents to process, what data is available for validation, extraction and indexing, and how the documents are to be retrieved… your imaging project will be successful.

III. How to Use It

A. Create User Defined Variables

The first step in creating a vFILER workflow is to

- create User Defined Variables (UDV).

- determine what databases with which vFILER can interact

- what "indexing fields" are intended for use

- the repository folder/file structure to use

- identify what indexed system or database to use for retrieval purposes.

Before launching vFILER, document each field name, the size (number of characters), the type (text, integer, date, currency), and how it is entered (manually, from a pull down list, from a database, from zone OCR, from a barcode, as a constant, required field or not or mask required). The following layout will be helpful to plan the designing of User Defined Variables (UDV)

User Defined Variable Layout

Document Name	Name of collection of user defined variables
Front end Database	Name of front end database
	Path (location) of front end database
Back end Database	Name of back end database
	Path (location) of back end database
Date	
Designer	
Variable #1 Name	
Size	characters
Type	Text, Integer, Date or Currency
Entered	Manually, From a List, From a Database, Constant, From OCR, From Barcode
Required	Yes or No
Mask Required	Yes or No
Used in Folder structure	Yes or No
Used in File structure	Yes or No

Repeat for User Defined Variables # 1 through nth.

User defined variables are entered within the Design component under the step "Indexing". After documenting all required user defined variables, begin to build a workflow. User defined variables can be stored within the UDV Library using the "Save" option within Indexer setup for use by other workflows.

B. Create a Workflow Example: Proof of Deliveries

The documents this workflow will process are common with anyone who delivers merchandise or services to another. The customer's signature is required to prove that

the products or services have been received. Typically, this is done through a manual filing system that can be cumbersome to use and is not easily managed. vFILER can process the scanned documents, index them, file them electronically and retrieve them from any workstation.

The vFILER demonstration software includes 5 sample documents located in C:\Work area and demodata\My Input\Northwind Tifs, file names are 11072.TIF through 11076.TIF.

The variables required for indexing in this sample workflow are:

Variable #1- InvoiceNumber, 5 characters, Text, Manual, Required, No mask, only used in File structure.

Variable #2- CustomerName, 25 characters, Text, Manual, Required, No mask, only used in Folder structure

Variable #3- InvoiceDate, 12 characters, Date, Manual, Required, No mask, only used in File structure

Variable #4- InvoiceAmount, 10 characters, Currency, Required, No mask, only used in File structure.

> **Note: The names assigned for User Defined Variables can be automatically assigned as column headings of the backend database for purposes of retrieval (see Publish to Database).**

Launch the vFILER program by double clicking the vFILER.exe file found in C:\ Work area and demodata.   The "splash" screen will appear. It indicates the remaining number of launches available and the remaining number of documents to publish during the evaluation period.

Select the Design component. See below.
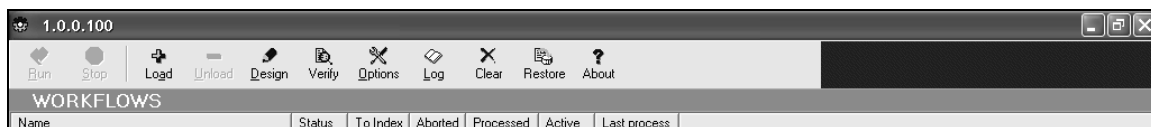
Select "New" Workflow.   See below.
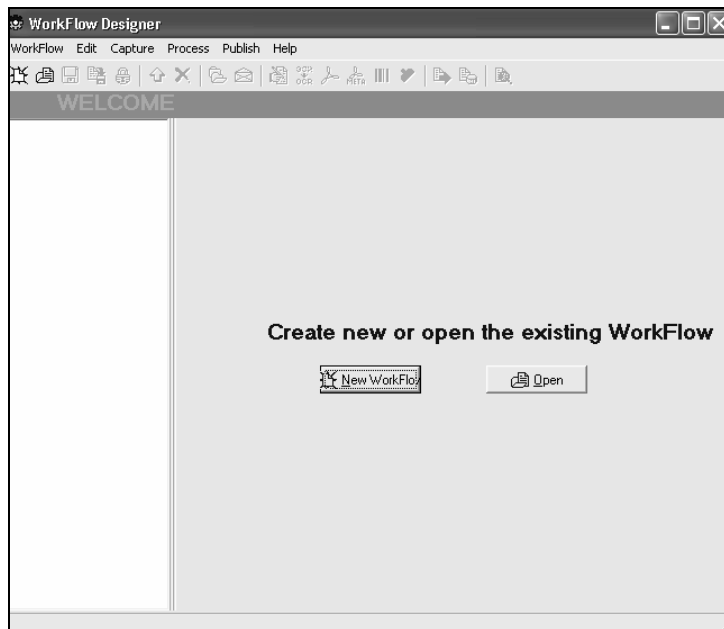
Enter Workflow Name- "Proof of Delivery". See Below.

Optionally, enter a description.

Place a "checkmark" on Capture from Folder, Indexer, and Publish to Folder. See below.

Select OK. See below.
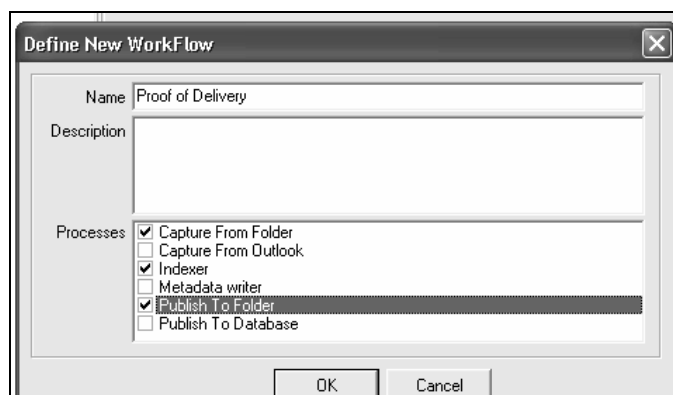
C.   Design- Capture from Folder

The program will display the Proof of Delivery workflow name. The component, Capture from Folder, will be highlighted and the Capture from Folder options are available for user input. See below.
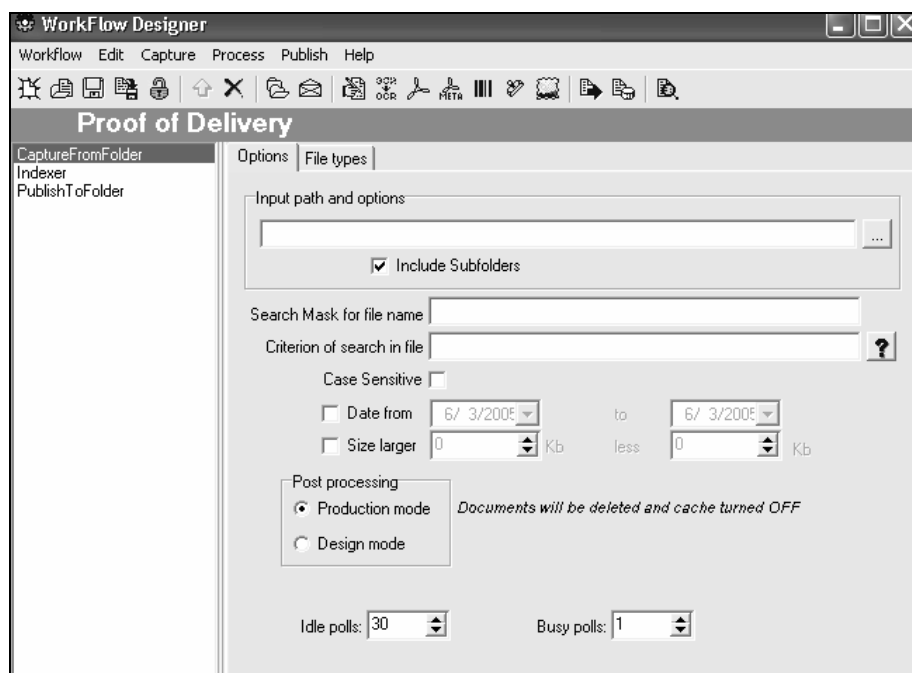
> **Note: Within the folder C:\Work area and demodata\My Input\Northwind TIFs there are 5 sample Proof of Delivery documents. Use Windows Explorer to navigate to this folder. Open the document (s) 11072.TIF through 11076.TIF) to become familiar with them.**

In vFILER Workflow Designer , use the browse (ellipse) button, at the end of Input path and options, to navigate to the C:\Work area and demodata\My Input\Northwind TIFs folder and select OK. (see below)
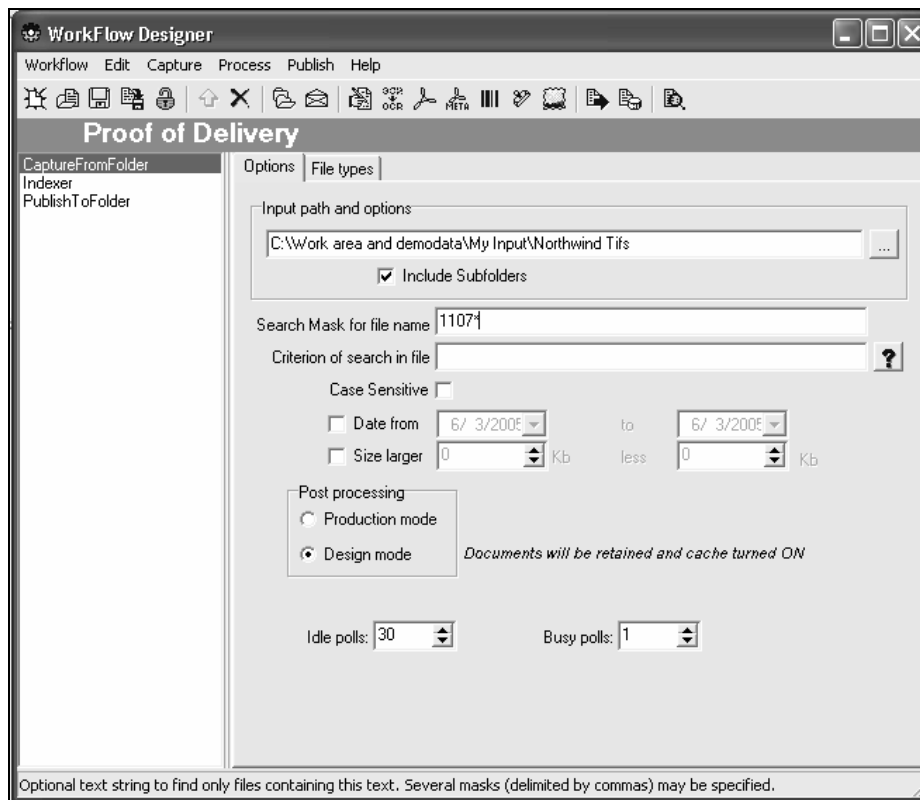
Enter "1107*" in "Search Mask for file name" (see above). This will capture only documents starting with 1107.

Skip the search options section and select the "Design mode" option under post processing. This will allow the processing of the same documents multiple times while learning vFILER. In production work, the setting would be "Production mode".

Use the default polling sequences of 30 second idle poll (number of seconds between attempts to find documents within the designated folder) and 1 second busy poll (number of seconds between processing of found documents).

To reduce processing overhead during production, set the Idle polling interval higher. See below.
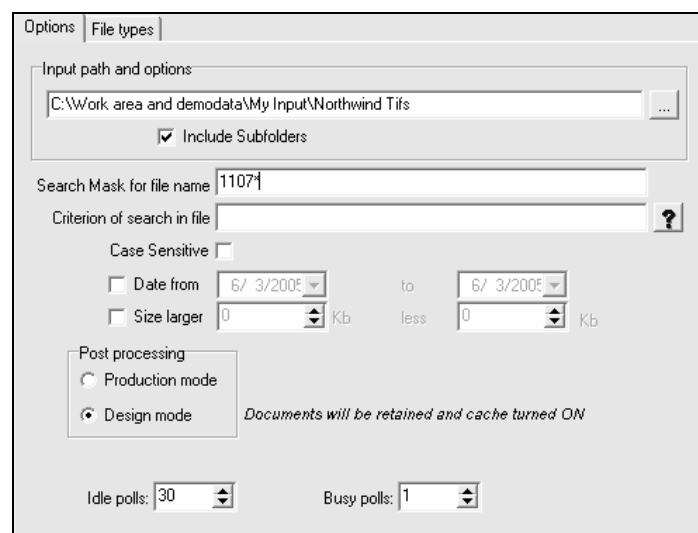
Select File Types tab. Select Tif documents. (see below)
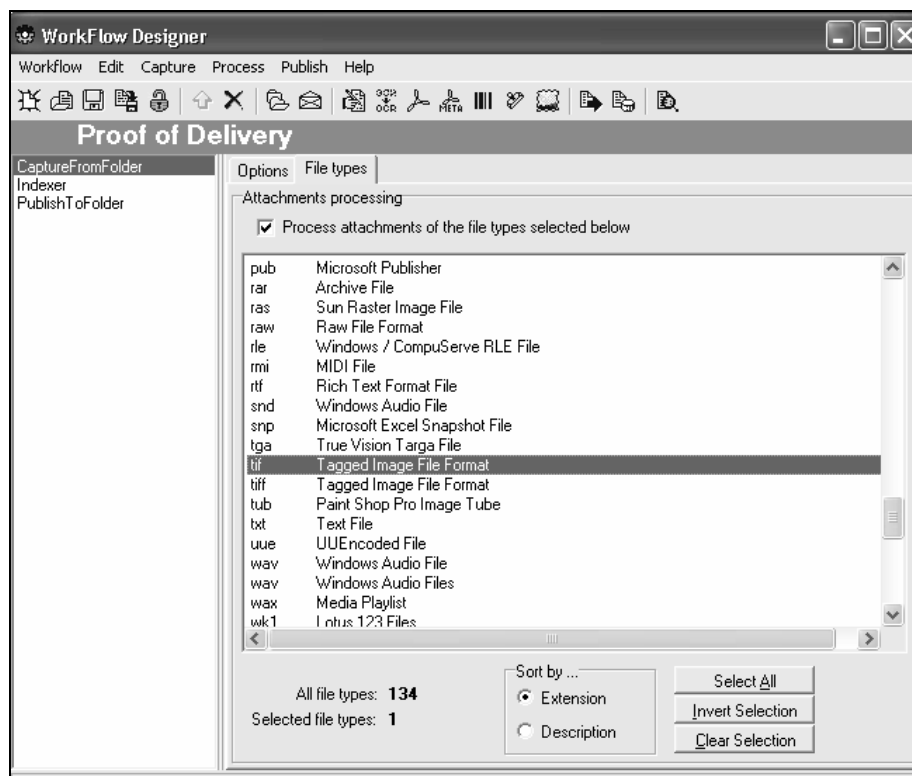
D. Design- Indexer

Select Indexer from workflow operations (on left, below Capture from Folder).

Select "+" (to add a new variable). See below.

> **Note: The "+" button is used to add a variable to the workflow. The "-"is used to delete a variable from the workflow. The up and down arrows are used to re-order the variables within a workflow. The Add button is used to create a new variable in the workflow FROM the variable library. The Save button is used to save a variable from the workflow INTO the variable library. The Remove button us used to remove variables FROM the variable library.**
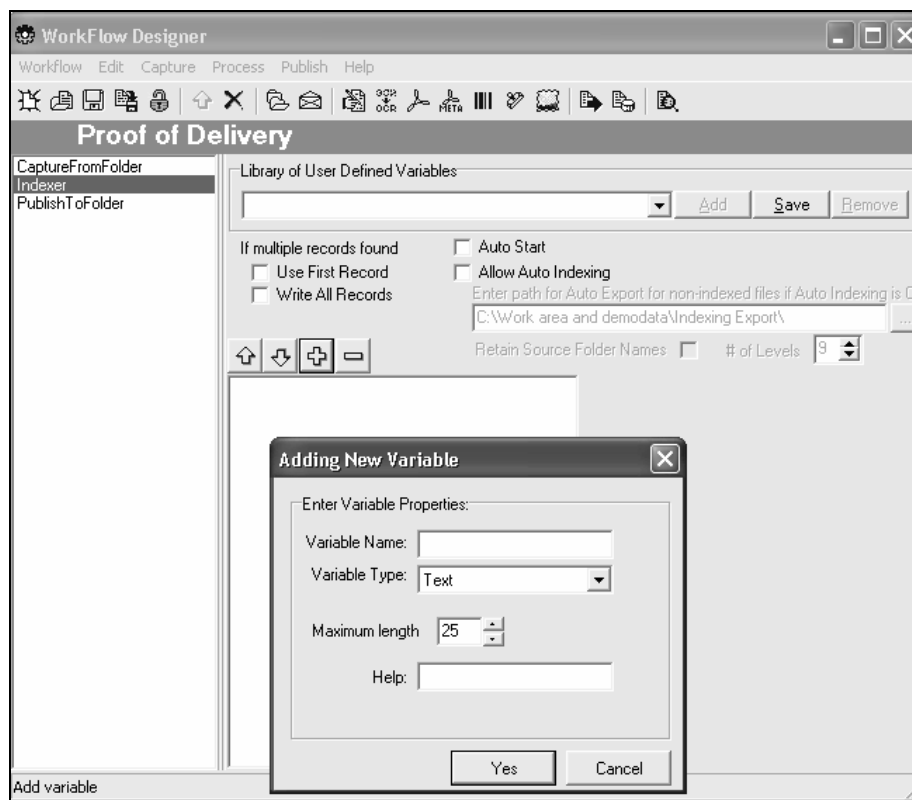
Enter in Variable Name "InvoiceNumber". vFILER will not allow entry of an invalid character, such as a space. Optionally, use a "_" (underscore). .

Select Text.

Change number of characters to 5.

Optionally, enter data into the Help section. This data will display during the indexing step to assist the operator (indexer).

Select the Yes button. See below.
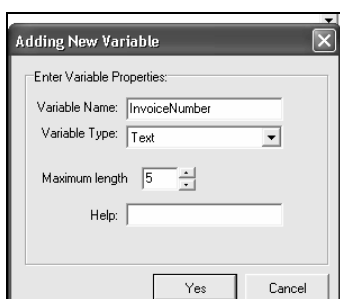
Verify entry mode is Manual (default), Field Required is checked (default). Select Auto Start (the document will display automatically after captured) See below.
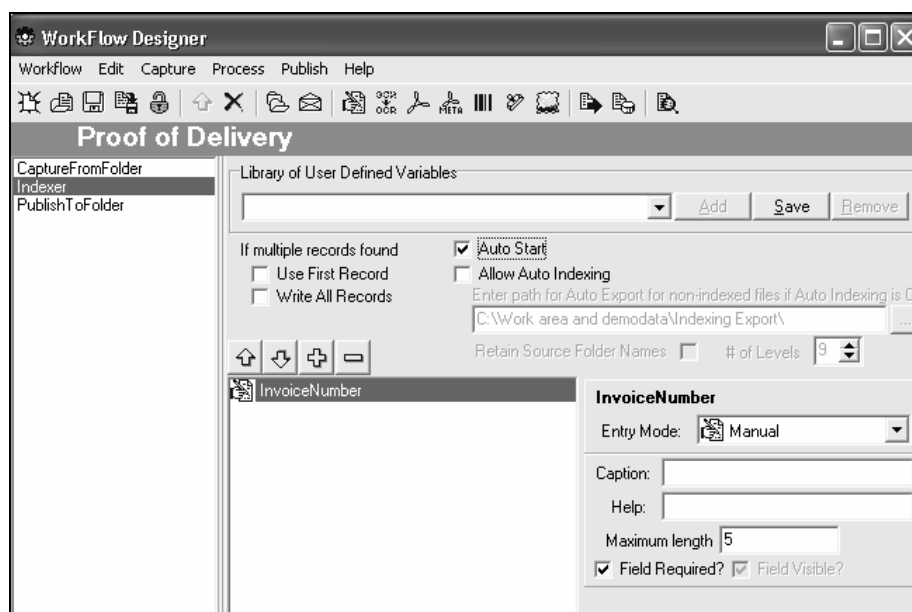
Repeat these steps until all variables (1-4) are built using the following parameters:

- Variable #1- InvoiceNumber, 5 characters, Text, Manual, Required.
- Variable #2- CustomerName, 25 characters, Text, Manual, Required.
- Variable #3- InvoiceDate, 12 characters, Date, Manual, Required.
- Variable #4- InvoiceAmount, 10 characters, Currency, Manual, Required.

E.   Design- Convert to PDF

Select Convert to PDF component from Process pull down menu (see below)
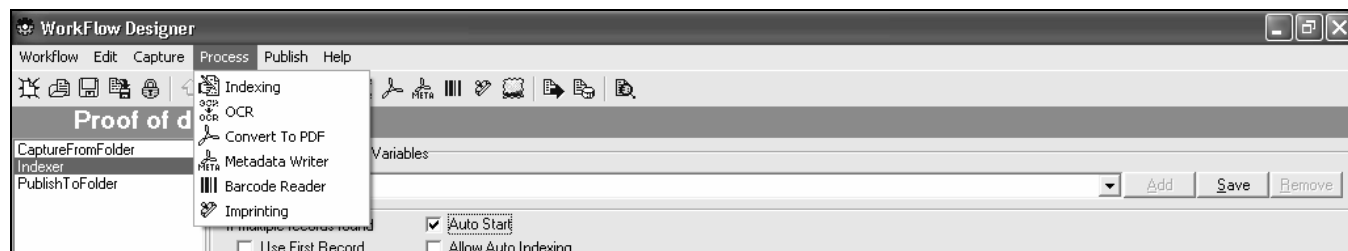
Using the (up) arrow, move Convert to PDF to below Indexer and above Publish to Folder. (see below)
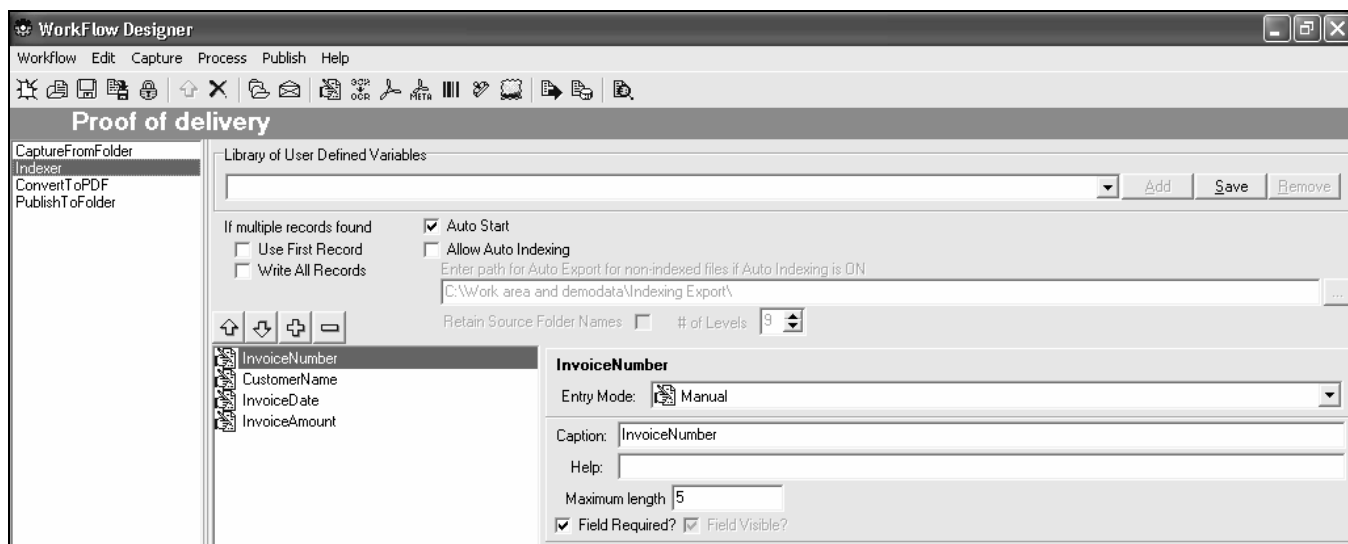
The following screen will appear when you select Convert to PDF. This component is used when the "source" image format is Tif and the designer wishes to populate the PDF metadata with data accumulated during workflow processing. The metadata can then be searched by using the PDRwin (client). If the "source" document is a PDF format, the correct component to populate metadata is Metadata Writer.
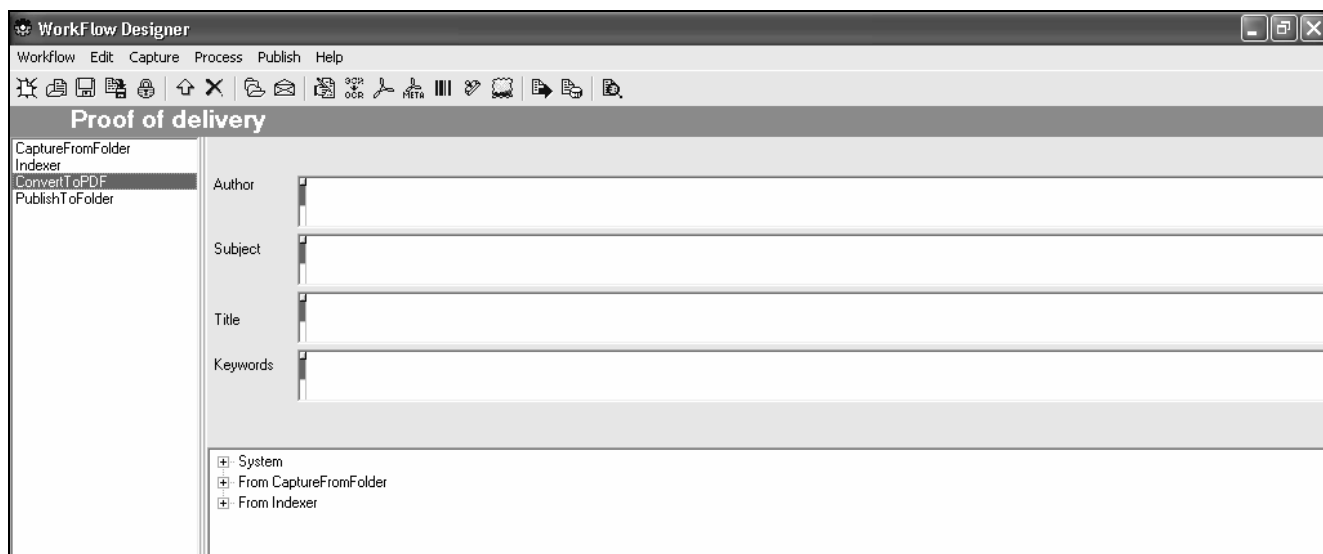
Expand From Indexer by selecting the "+". The four variables added during the Indexer step will appear. See below
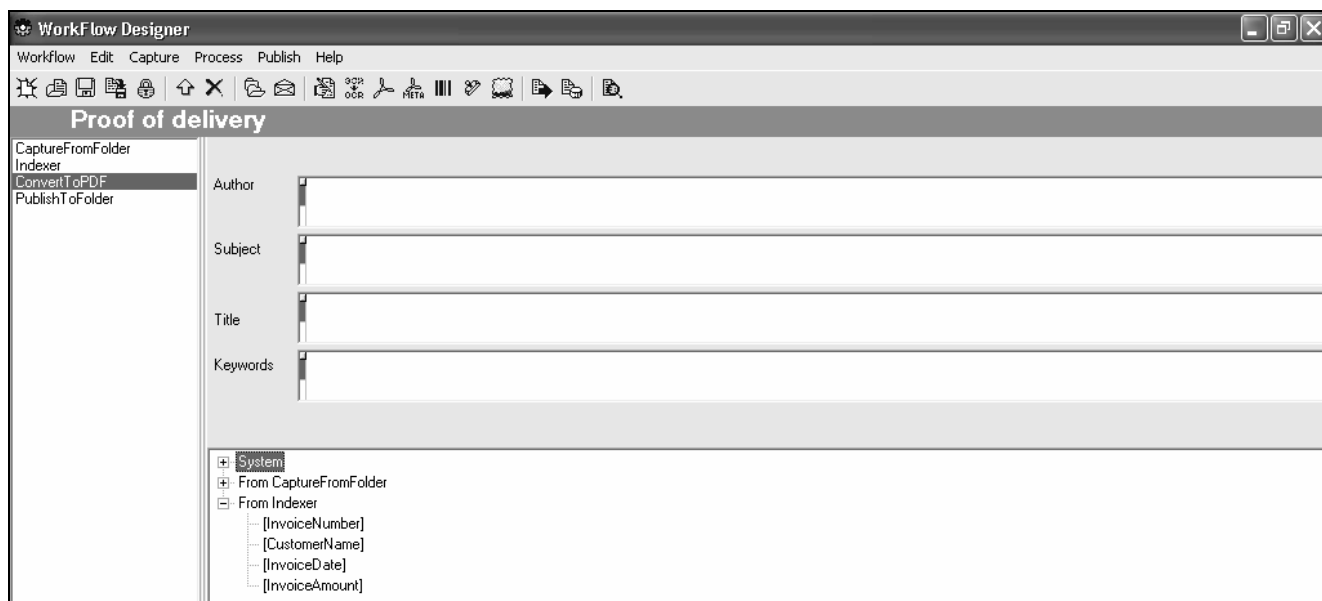
Highlight InvoiceNumber by clicking on it.

In a separate operation, "drag" the variable to the metadata field called Author and release. The variable name should appear in the property.
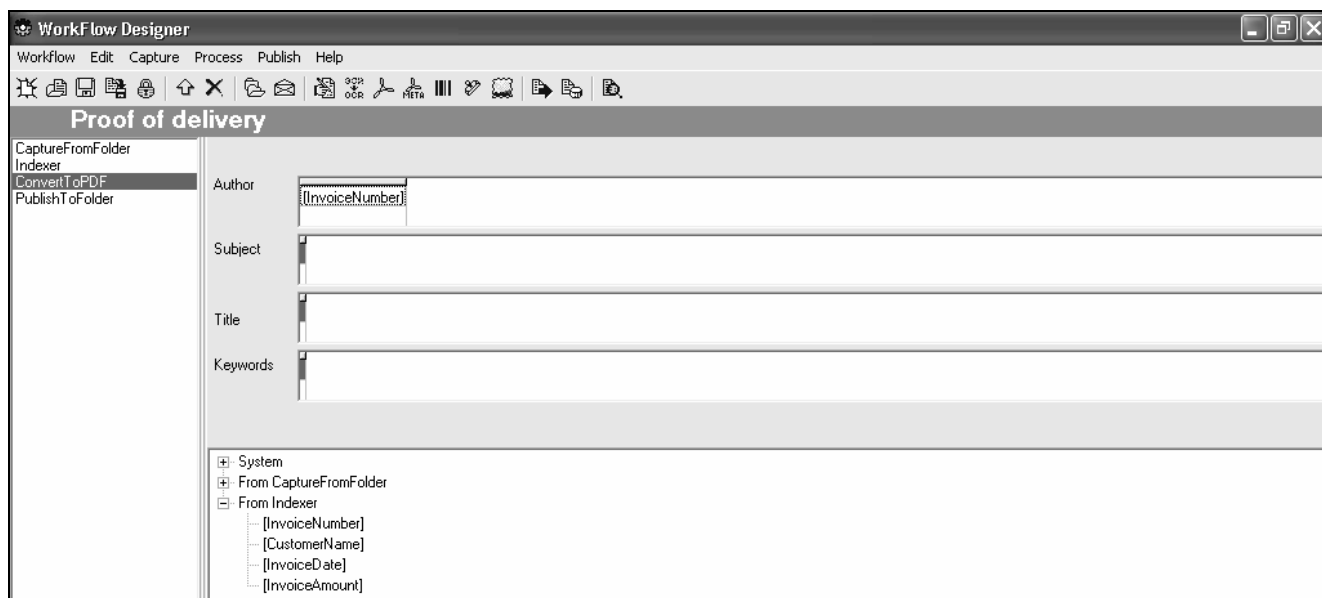
Repeat these steps for the following variables: InvoiceNumber to Author, CustomerName to Subject, InvoiceDate to Title and InvoiceAmount to Keywords. See below.
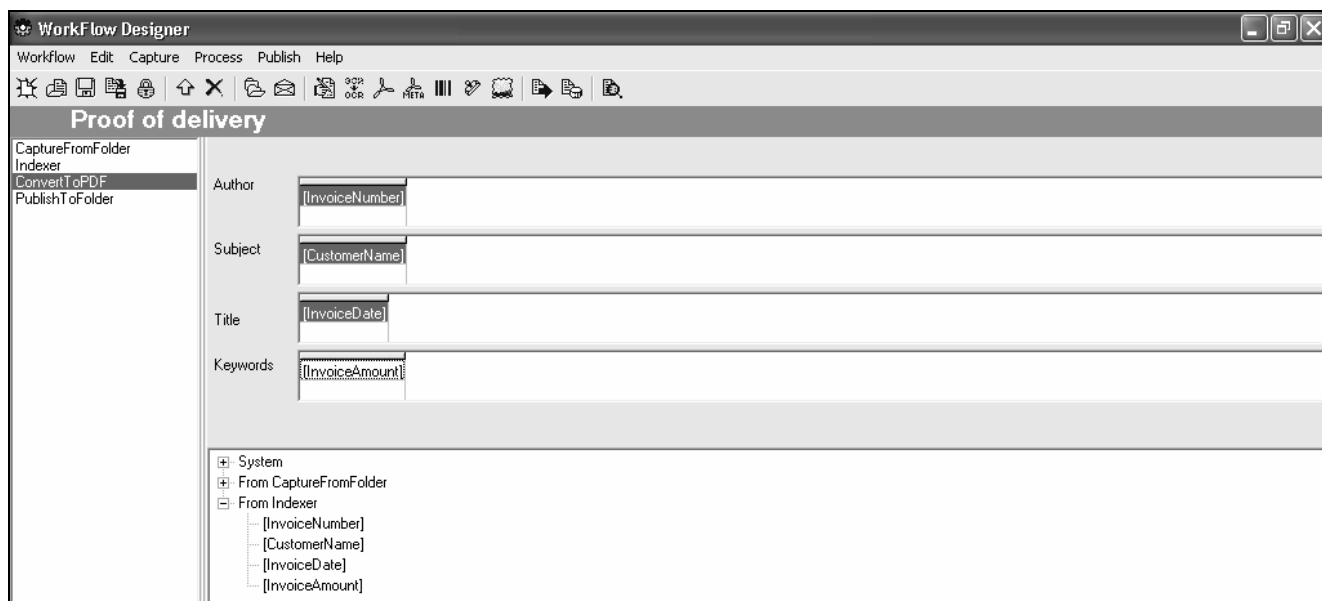
Each metadata variable (e.g. Subject) allows 256 characters. Indexing Services will "index" the variables irrespective of the location.

F.   Design- Publish to Folder

Select Publish to Folder from the operations (on left, below Convert to PDF)

Using the browse (ellipse) button, at the end of Output path, point to C:\Work area and demodata\My Output. See below.
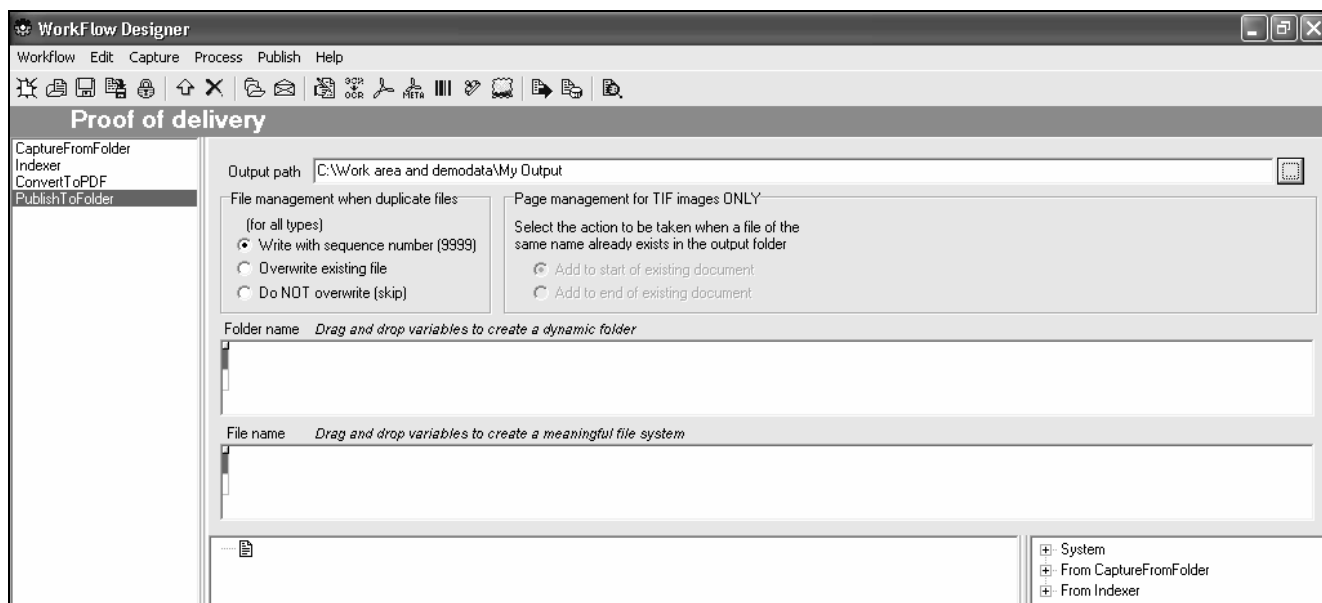
For purposes of this simple workflow, create a dynamic folder structure as follows:

```
C:\Work area and demodata
   \My Output
      \PODS
         \ABC Company (CustomerName)
               \2004 (from system variable SystemDateTime using a mask of YYYY –
long year)
```

```
                \01 January (from system variables SystemDateTime using masks
      mm -short month AND mmmm -long month)
              File Name = InvoiceNumber, InvoiceDate.
                \02 February
                    File Name = InvoiceNumber, InvoiceDate.
                \03 March
                    File Name = InvoiceNumber, InvoiceDate
```

Position the cursor to the small blue "block" under Folder Name section and click once. The blue should turn to white. Type in the words "PODS" and depress Enter. When the workflow runs, the "PODS" sub-folder will be created automatically. Position the cursor to the right of "PODS" (under the Folder Section) and depress Insert (or right click to allow selection of Insert/Delete). Another block will appear. Type a "\" and depress Enter. This will designate a "sub-folder" to follow. Position the cursor to the "+", left of From Indexer and click once to "expand" it. The available variables will appear. Position the cursor to the variable named "CustomerName" and click once. It will be highlighted in blue. In a separate step, "drag" the variable to the right of "\" (under the Folder Section) and release. The variable name will appear to the right of "\". Position the cursor to the right of the variable "CustomerName" and depress Insert (or right click to allow selection of Insert/Delete). Another block will appear. Type a "\" and depress Enter. This will designate a "sub-folder" to follow. See below.
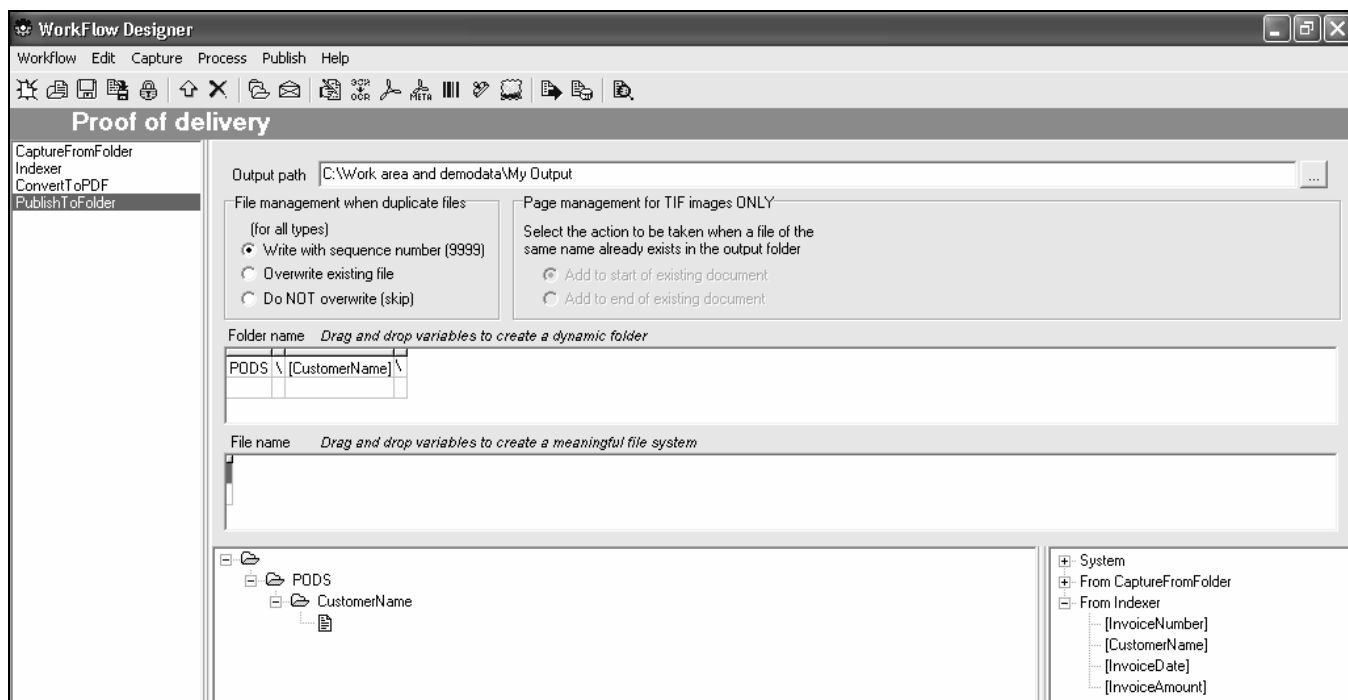
Position the cursor to the "+", left of System and click once to "expand" it. The available variables will appear. Position the cursor to the variable "SystemDateTime" and click once. It will be highlighted in blue. In a separate step, "drag" the variable to the right of "\" (under the Folder Section) and release. The variable name will appear to the right of "\". (Note: this will be used for the YYYY (year) folder). See below.
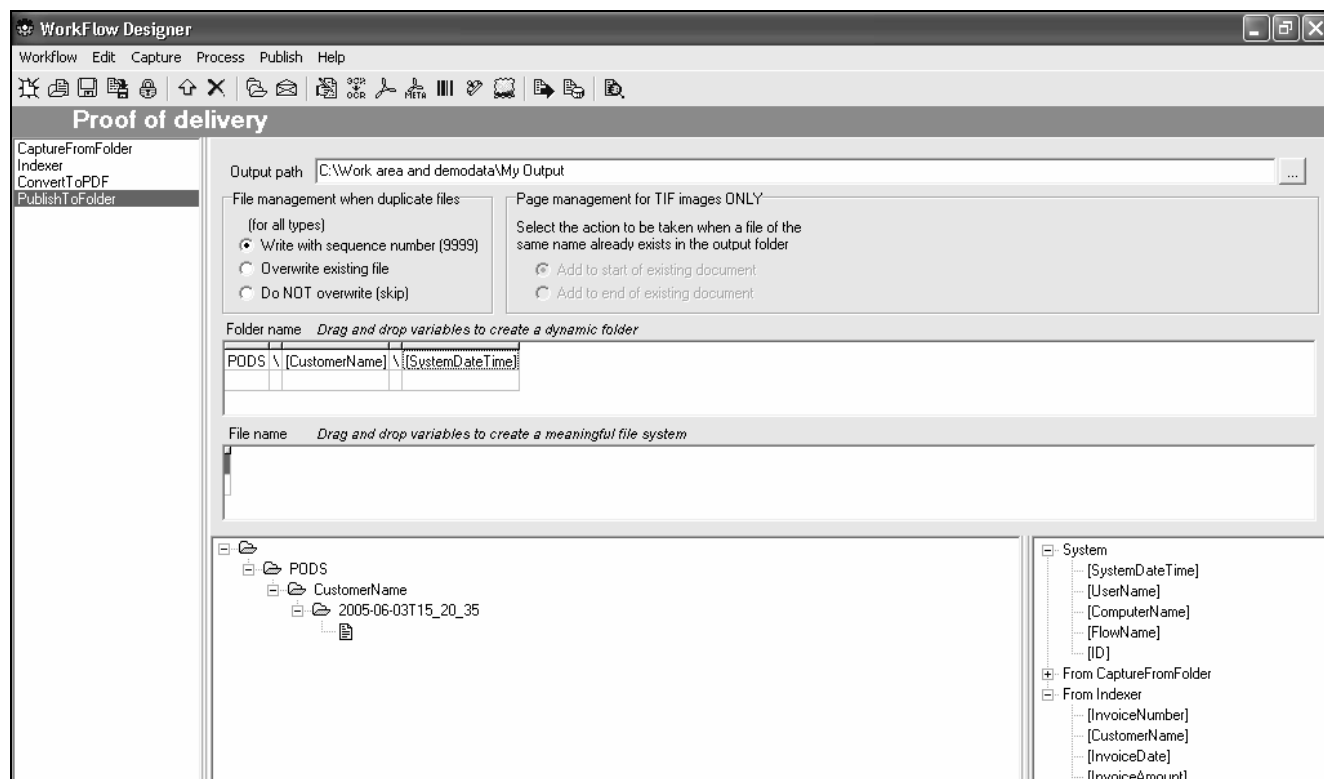
Position the cursor to the right of the variable "SystemDateTime" and depress Insert (or right click to allow selection of Insert/Delete). Another block will appear. Type a "\" and depress Enter. This will designate a "sub folder" to follow. Position the cursor, again, to the system variable "SystemDateTime" and click once. It will be highlighted in blue. In a separate step, "drag" the variable to the right of the "\" (under the Folder Section) and release. Another occurrence of "SystemDateTime" will appear to the right of "\". (Note: this will be used for the (Month) folder) See below.
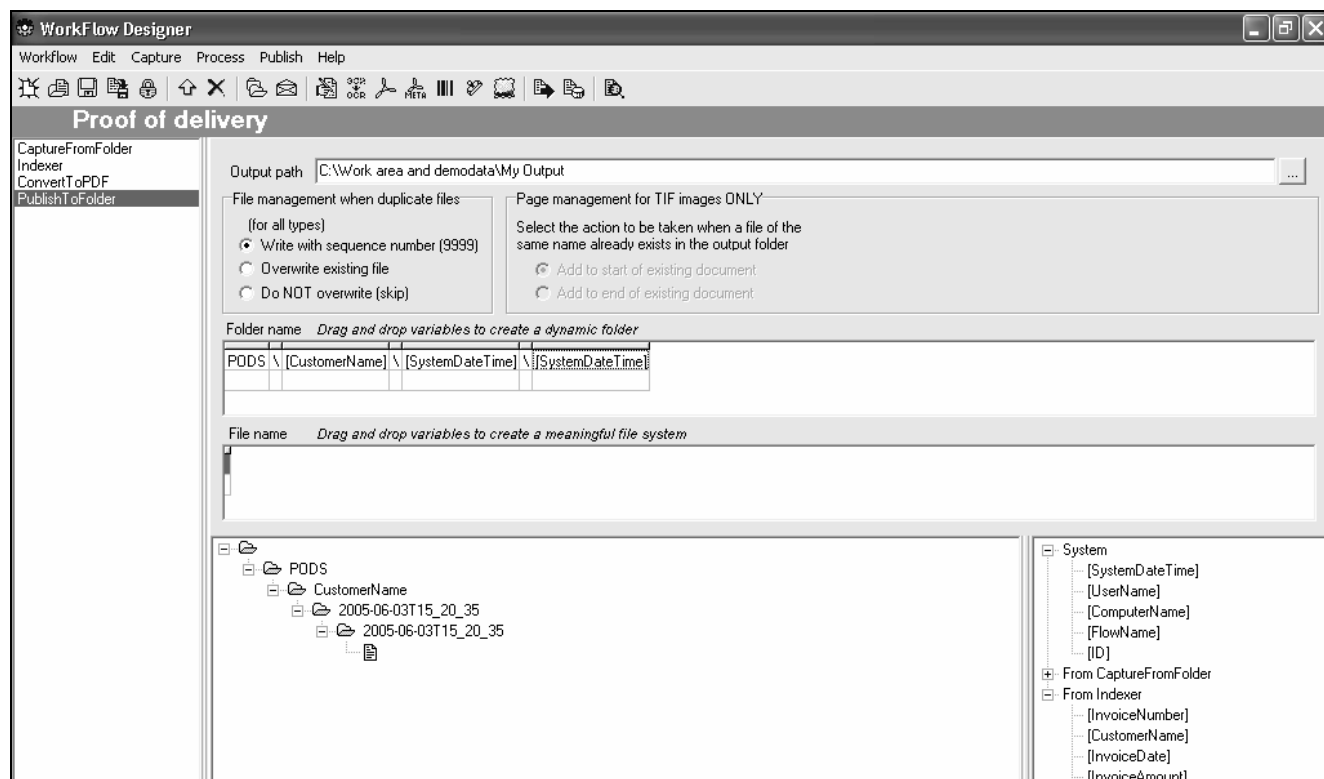
Position the cursor BELOW the first occurrence of "SystemDateTime" and double-click.
The Mask Editor window will appear. See below.
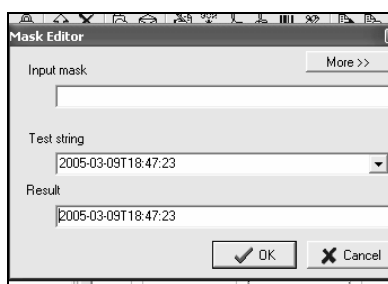
Enter "YYYY" and see that the "Result" is this year. Select OK. See below.
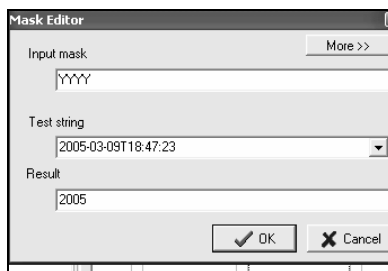
Position the cursor BELOW the second occurrence of "SystemDateTime" and double-click.
The Mask editor will appear again. Enter "MM MMMM" and see that the "Result" is month
in short, numeric form and alpha. Select OK   See below.
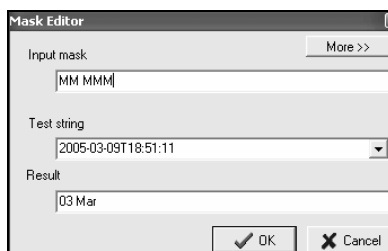
Confirm the "setup" is accurate by reviewing the graphical representation below. To delete any block, position the cursor and depress Delete. The final result will appear as below.
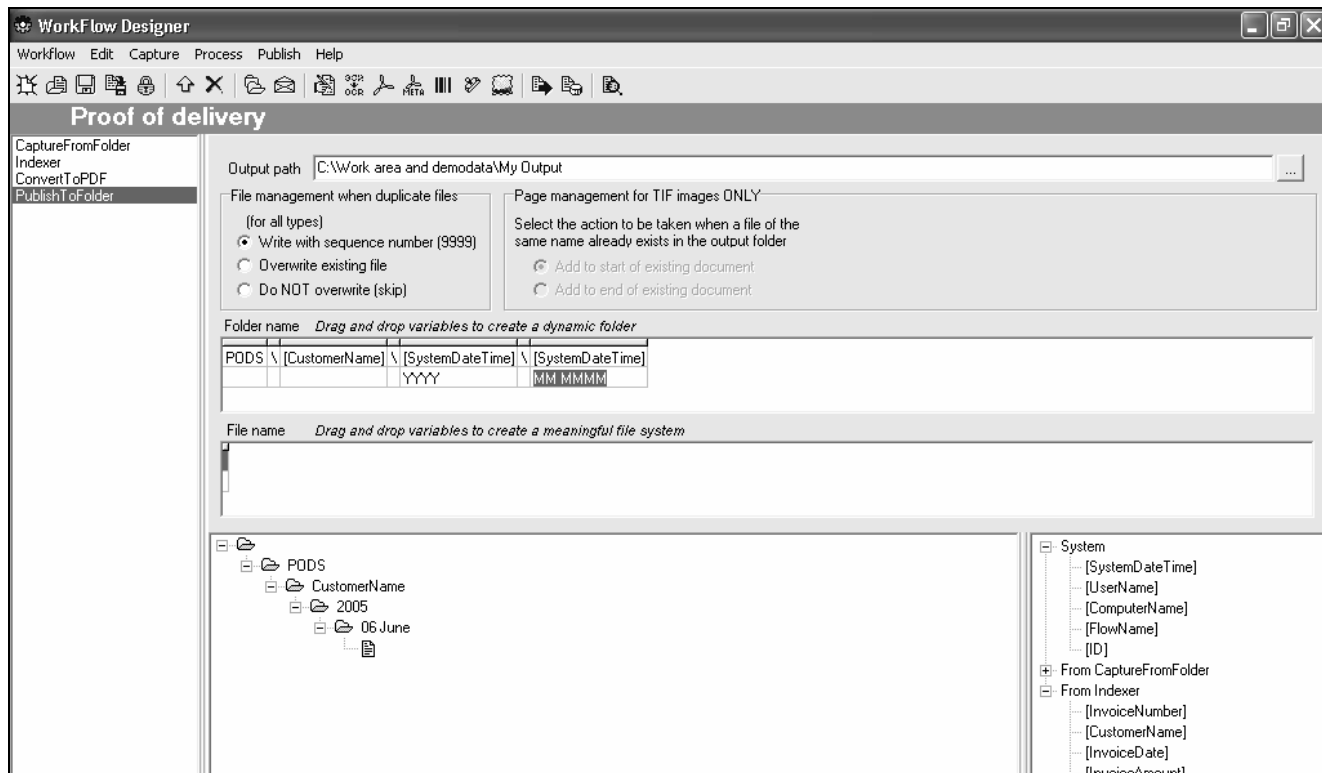
Use the Mask Editor to "parse" any variable. Position the cursor below ANY variable and double-click. The Mask editor pop-up menu will appear. This function will allow the ability to "parse" the contents of any variable. For example, the result of a database lookup column may be "123456-9999". The "-9999" may be superfluous data in designing a required folder or file system. The simple mask of: CCCCCCXXXX would result in "12345". Sophisticated masks are available. Use the on-line instructions and the imbedded "test" program to verify the logic. Plan the folder and file structures to maximize their efficiencies. After finalizing the folder structure and confirming the structure by reviewing the graphical presentation on the screen, proceed to design the file structure.

To build the file system according to the schema presented earlier, position the cursor to the "+", left of From Indexer and click once to "expand" it. The available variables will appear. See below.
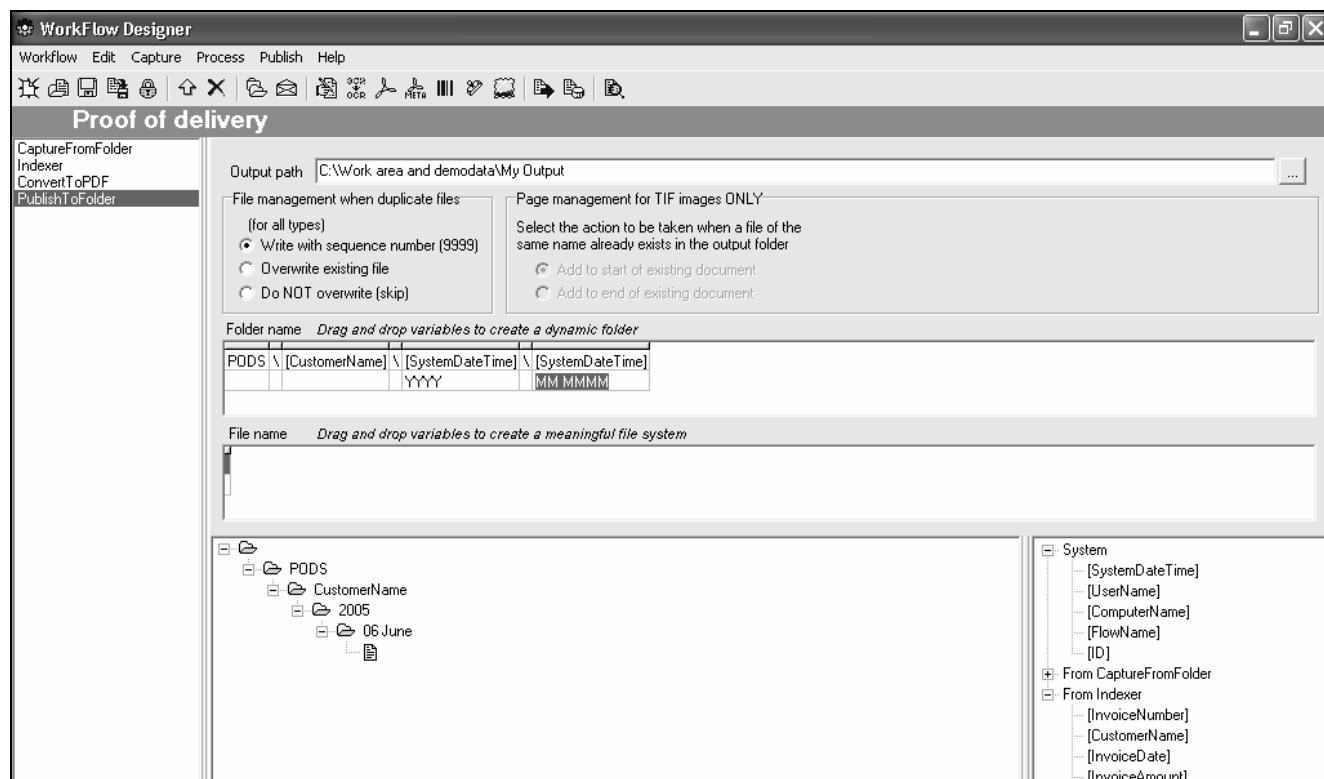
Position the cursor to the variable named "InvoiceNumber" and click once. It will be highlighted in blue. In a separate step, "drag" the variable to the File Section and release. The variable name will appear. Position the cursor to the right of "InvoiceNumber" (under File Section) and depress Insert (or right click to allow selection of Insert/Delete) . Another block will appear. Type a "space" and depress Enter. This will designate a "space" between file names. File names can be 256 characters. Use the order of file names wisely so they appear in the order desired. Position the cursor on the From Indexer variable "InvoiceDate" and click once. It will be highlighted in blue. In a separate step, "drag" the variable to the right of the space entered (under File Section) and release. The variable name will appear. Position the cursor to the right of InvoiceDate and depress Insert (or right click to allow selection of Insert/Delete) . Type a "space" and depress Enter. Position the cursor to From Indexer variable InvoiceAmount. It will be highlighted in blue. In a separate step, "drag" the variable to the right of the space entered (under File Section) and release. Verify that the file and folder structure is correct. (See below)
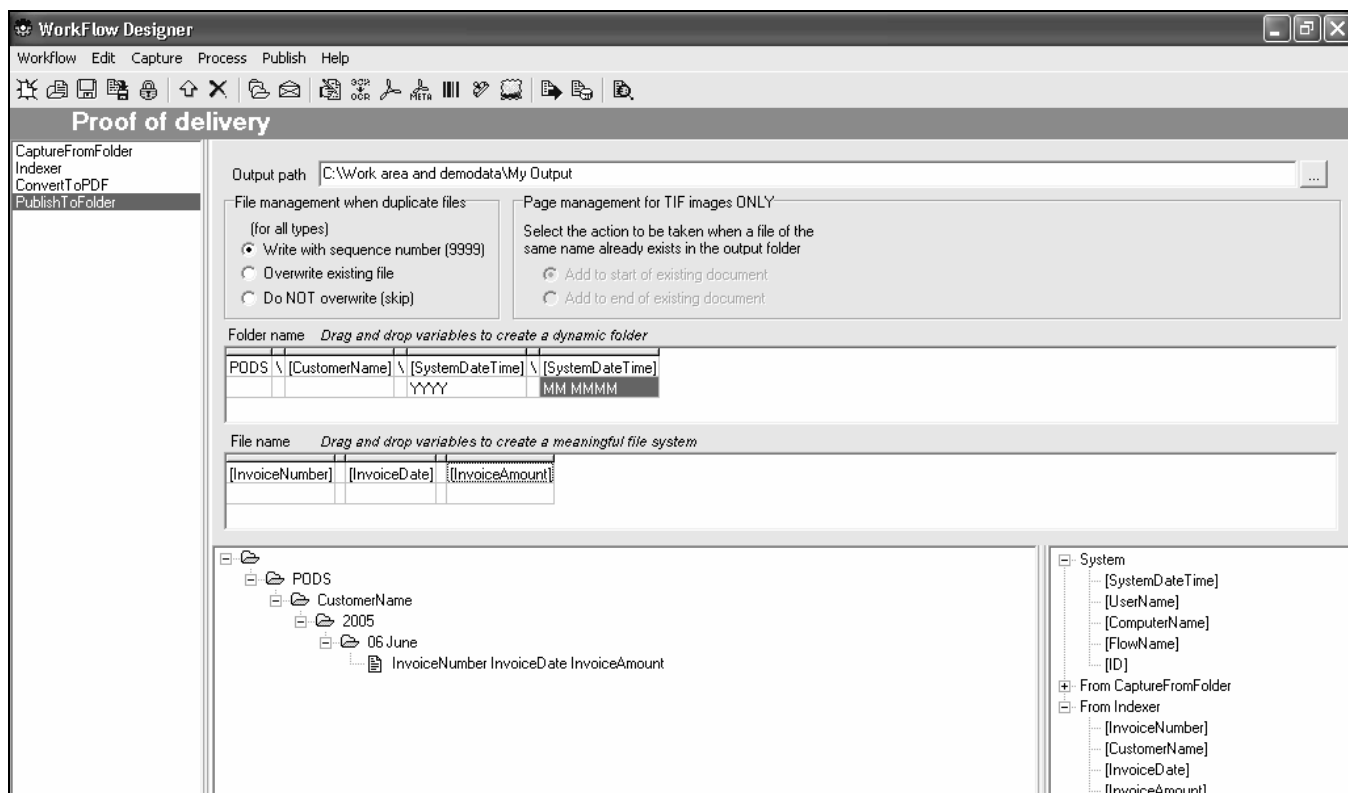
Use the Mask Editor for file names by following the instructions provided earlier for folders. Unlimited folders can be published using multiple Publish to Folder components. To add an additional Publish to Folder component, select Publish from the vFILER menu, select Publish to Folder. A new Publish to Folder component will be added to the workflow (which must be configured). Each Publish to Folder component can create a unique output dynamic folder structure.

Save the workflow by clicking on the "floppy disk" icon or select the "workflow" menu to save/save as. Although you may save the workflow to any location, workflows are normally saved in C:\Workarea and demodata\Workflows. Exit the Design window by selecting "X" (upper right option) or by selecting workflow>exit or Alt-X.

> **Note: The workflow name can be changed by selecting workflow properties. (see below)**
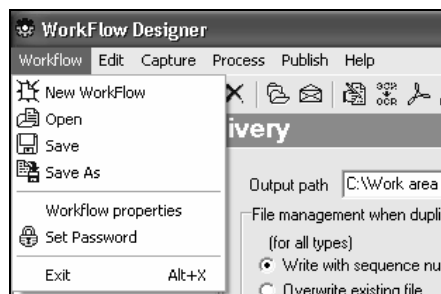
This was a very simple workflow. More sophisticated and elaborate workflows can be designed that would include other vFILER components including: Capture from Email, Database Lookup and Publish to Database. vFILER has other advanced components (zone OCR, Bar Code Recognition) for designing automated flows.

To run the saved workflow "Proof of Delivery", LOAD the workflow to the workflows to be processed. (vFILER can simultaneously run multiple workflows) by selecting the LOAD button. Select the Proof of Delivery workflow from the saved location (C:\Work area and demodata\Workflows). The workflow is ready to process. See below.
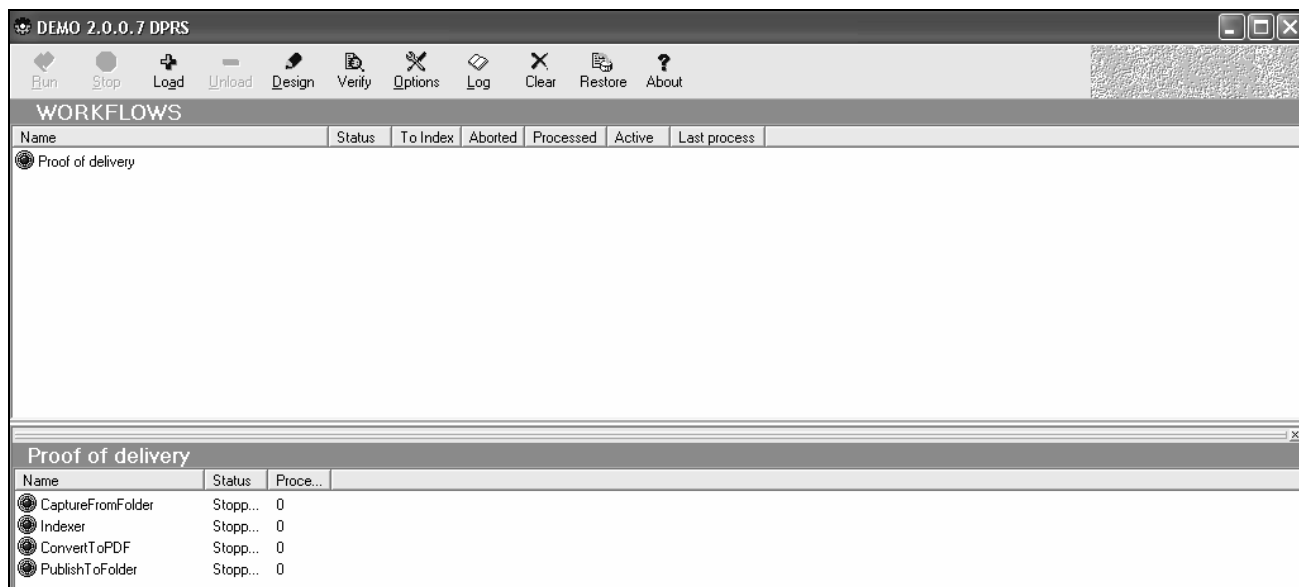
Select the RUN button. The following screen will appear. Select the default (see below)

Select OK. vFILER will Capture, Index and Process a batch.
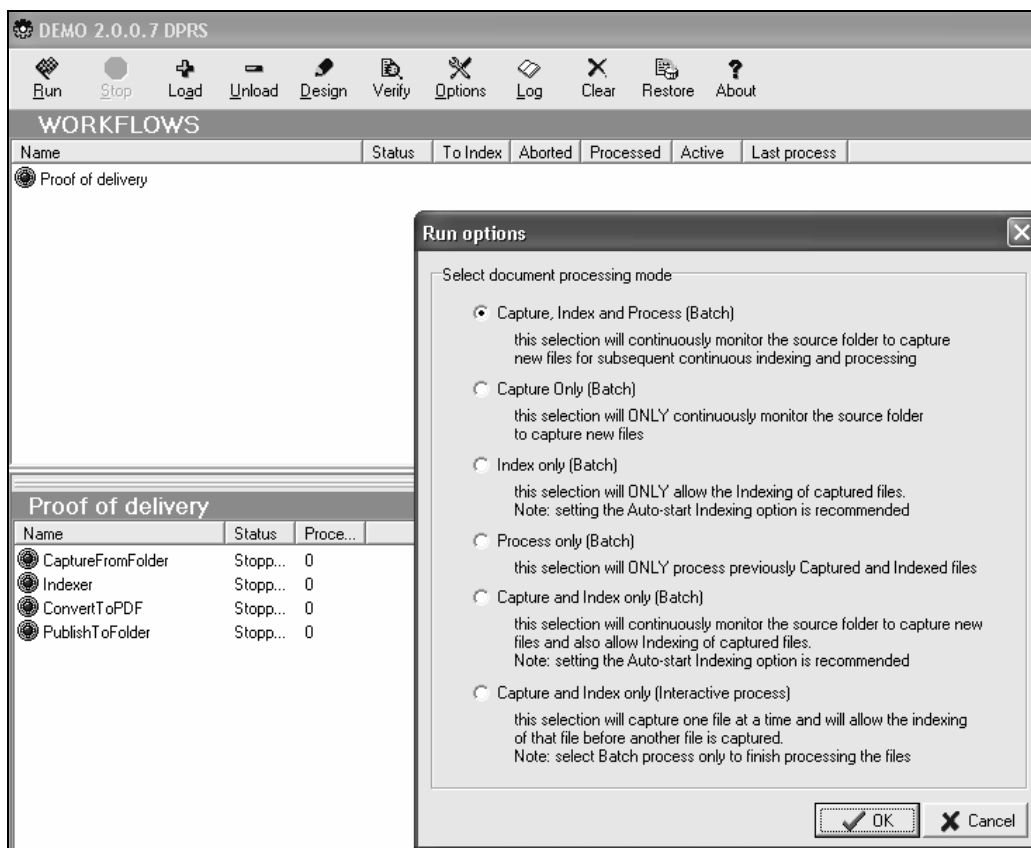
The workflow will begin to capture documents. Select a file (on the right, To Index) to index by double-clicking on the file name. (11072.pdf) See below. Note: the image would appear automatically if the Auto Start option was selected in DESIGN, Indexer. Use the image controls (above the image) to rotate, increase/decrease the size, disable thumbnails, etc.

Enter all appropriate indexing information. See below.

Select "Save and Next" to have the next document appear automatically, or "Save and Exit", or "Save and Index Again" or "Export" to another folder (in case of bad scans, wrong data, etc), or "Cancel" to exit Indexing and not process the remaining document(s). The indexing information for the five documents is:

InvoiceNumber	CustomerName	InvoiceDate	InvoiceAmount
11072	Ernst Handel	Sep 09 2003	5476.54
11073	Pericles Cornidas clasica	Sep 09 2003	324.95
11074	Simons bistro	Sep 09 2003	250.52
11075	Richter Supermarket	Sep 09 2003	504.29
11076	Bon app	Sep 09 2003	831.03

The "international" sample documents are provided by the Microsoft Access application.

 After processing all the documents (11072-11076), review the C:\Work area and demodata\My Output\PODS to verify that the images processed properly. See below.
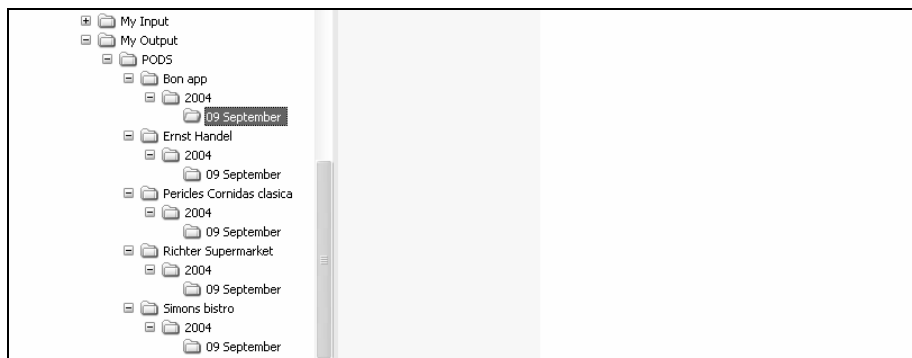
Because the Capture to Folder option was set as "Design mode", and not "Production mode", the documents can be processed again. However, (very important) the software "remembers" the documents processed via a "cache" to avoid duplicate processing when using the "design mode. Clear the cache by selecting the Clear button and clearing Capture from Folder or Capture from Email.. To clear "Captured documents", which are documents that have been captured and are awaiting indexing, (located in C:\work area and demodata\Captured) use the password "CLEAR JOBS".

Refer to Section IV to learn more about retrieving documents you have processed.

IV. <u>Retrieval- systems setup</u>

vFILER provides various methods to access data from all workstations. All "shared" folders must be designated accordingly, and the desired level of security must be established for both a domain or non-domain environment. The following is an overview of each:

A. Windows Explorer

vFILER uses the windows file structure (NTFS required). An authorized user can navigate to a "shared" drive or folder and browse to the desired file. The "Search" command can used to find any data within the folder and file structures created by vFILER.

B. Indexing Services Retrieval using PDRwin, client based Overview

Indexing Services is included with Windows 2000, Windows XP Pro, and Windows Server. (see Indexing Services setup) Using the free downloadable Adobe iFilter 6.0 (see Adobe iFilter installation), sophisticated searches can be performed on PDF documents using PDRwin, a client based program from any workstation.

C. Indexing Services setup

This is an enterprise level program developed by Microsoft that is easy to setup.

The following decisions should be made prior to Indexing Services setup:

*Where will the catalog file (index) be stored and what will it be named? The recommended name is Repository. The recommended location is C:\WINDOWS\system32. The instructions for Indexing Services setup reflect this decision.

*Where are images stored? That is the "path(s)" that the catalog must manage. The instructions reflect an image path of: C:\Work area and demodata\My Output

*Should separate directories (scope) be created for each application? The instructions reflect a directory path of C:\Work area and demodata\My Output.

When the above questions are answered, Indexing Services can be setup.

Right click on My Computer and select manage to enter Computer Management to find Indexing Service. See below.

The following screen will appear. See below.
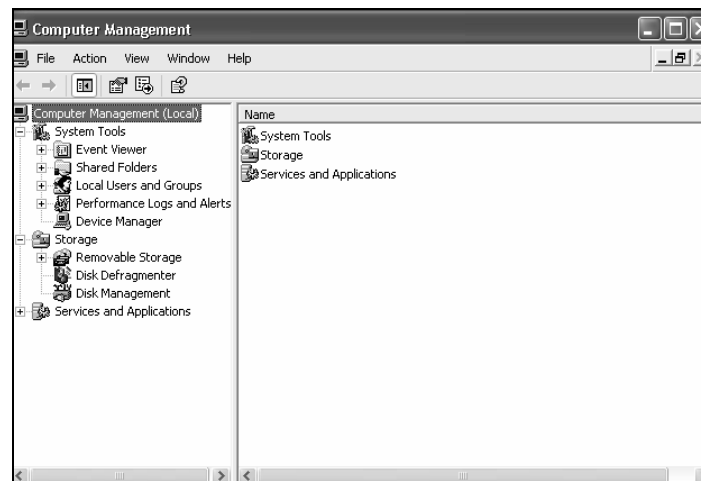
Enlarge Services and Applications by selecting the "+". See below.
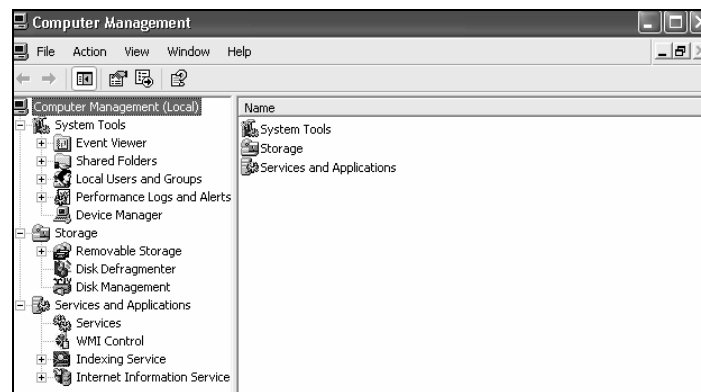
Right click on Indexing Services. The following screen will appear. See below.
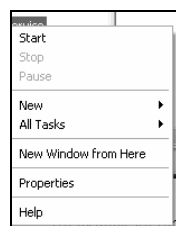
If the service is started (Stop in BOLD) then Stop the service by selecting Stop.

If the service is stopped (Start in BOLD) then select properties. The following window will appear. See below.
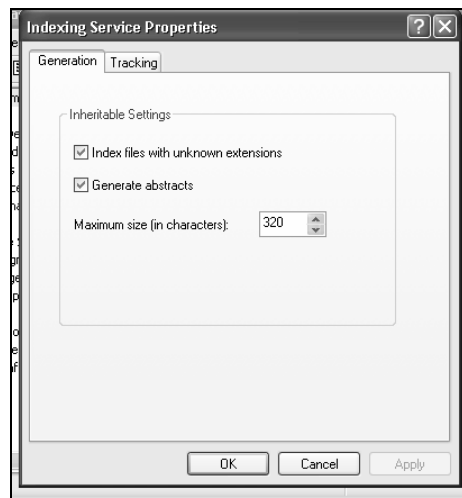
Select the options as shown above.

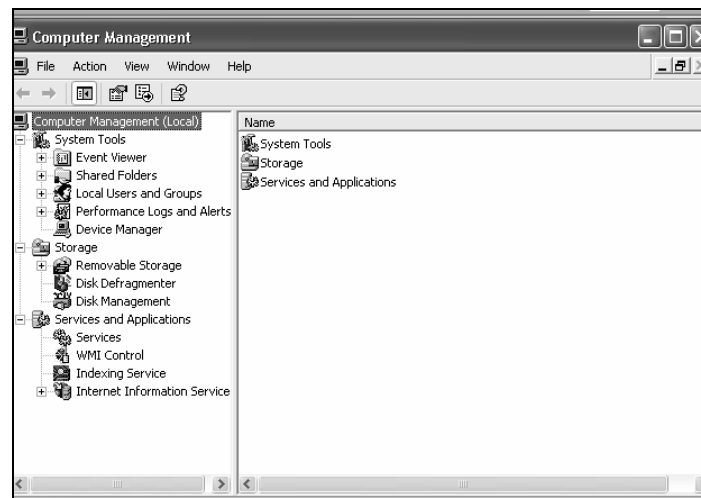Select "Tracking" tab. See above. The following window will appear. See below.
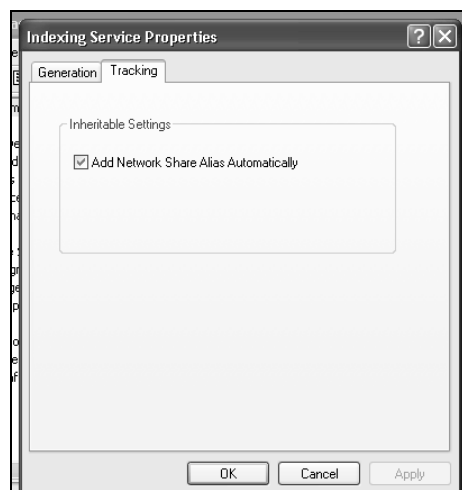
Select the options as shown above.

Select OK.

Enlarge Indexing Services by selecting the "+". See below.

The computer being used may display configured catalogs..

Right click on each catalog and select delete until there are no catalogs. See below.

Right click on Indexing Services. The following window will appear. See below.
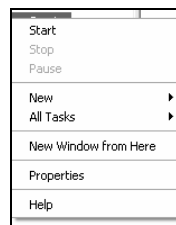
Select All Tasks. The following menu will appear. See below.

Select Tune Performance. The following menu will appear. See below.

Select Customize. The following menu will appear. See below.
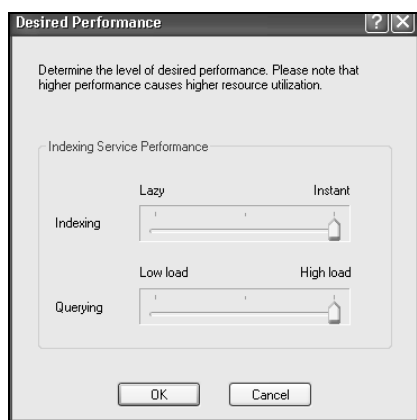
Slide the dials to Instant and High load as shown above. Select OK.

Note: This will allow indexing to take place immediately. Change the setting at any time.

Right click on Indexing Services. Select New, then select catalog. The following window will appear.
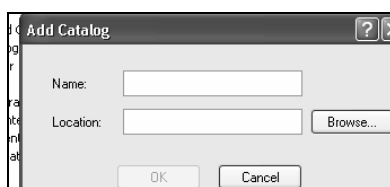
Enter Repository in Name. Select Browse button. Browse to and select C:\WINDOWSsystem32. The screen will appear as below. Select OK.
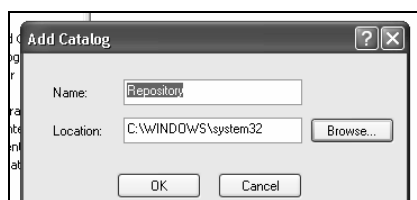
The following warning message will appear because the service is off. Select OK.
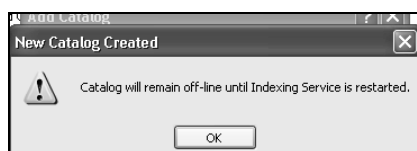
The following menu appears. Right click Repository. Select New. Select Directory.
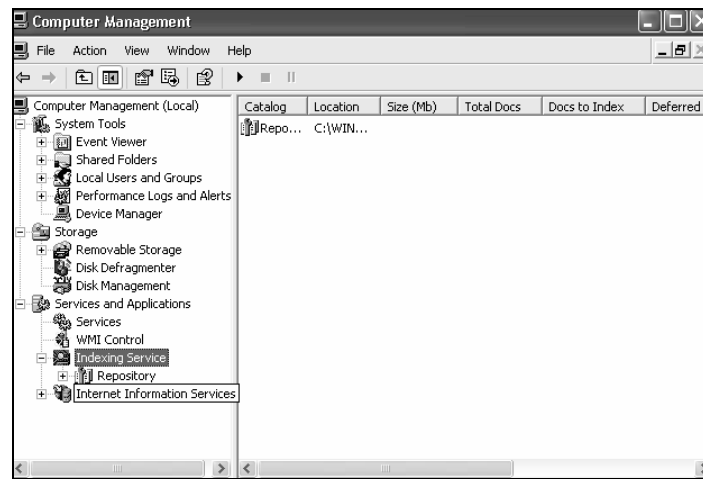
The following menu appears.
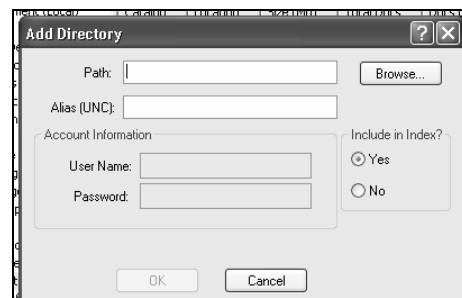
Select the Browse button and browse to C:\Workarea and demodata\My Output.

Note: This is a desktop (local) setup. For a "shared" environment, it is IMPORTANT that Alias (UNC) be used. The proper syntax is \\computername\sharename

Upon return to Computer Management, right click on Indexing Services and select Start. See below.
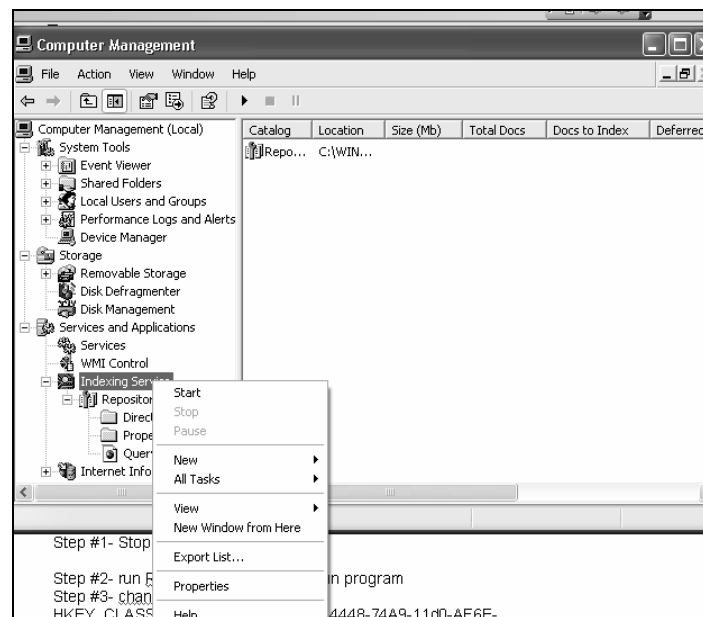
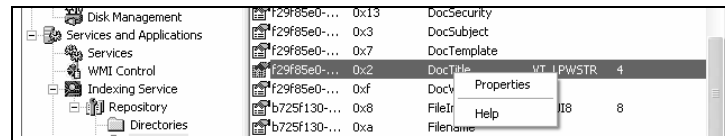The service will start and the catalog name (Repository), the Total Docs, Docs to Index, etc. will appear.   See below.
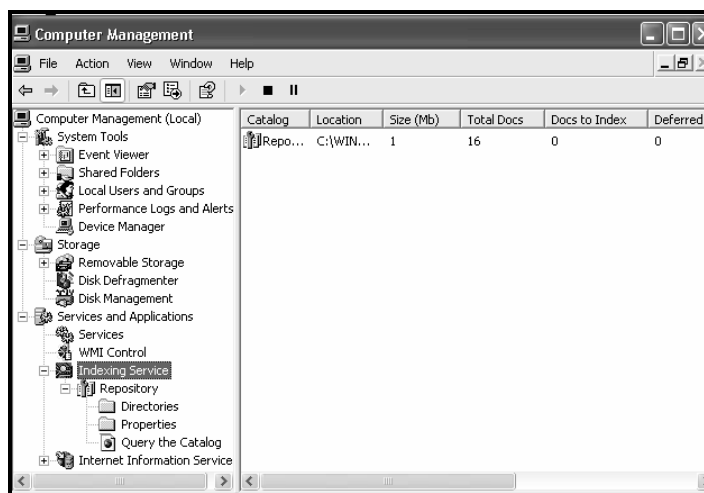
Click on Properties (under Repository).   Settings will appear.   See below.
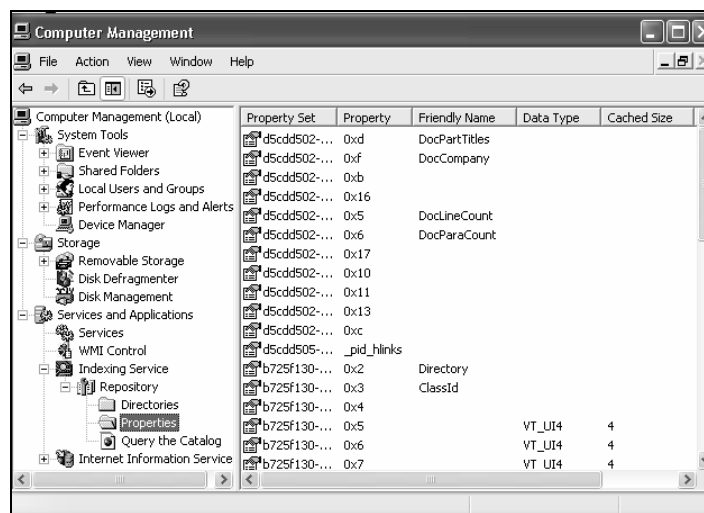
Click once on the Friendly Name tab to sort that section.   See Below.
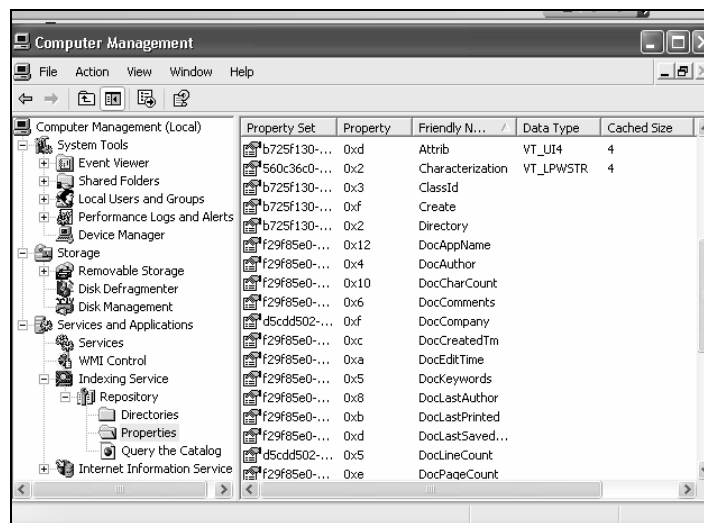
Find the property DocTitle. Right click on DocTitle. See below.

Select Properties. The following window will appear. See below.
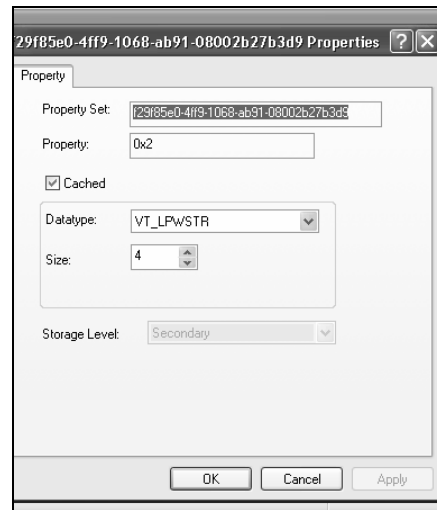
By default, the DocTitle property has the Cached option checked.

To search, using the index data stored in DocSubject, DocAuthor and DocKeywords, the Cached option must be set to "checked" in each of those Properties. Those variables have a default of NOT checked. It is common to have DocSubject, DocAuthor and DocKeywords NOT appear initially upon the startup of Indexing Services. They will eventually appear and must be configured properly.

The basic setup for Indexing Services is complete. Following the steps to download and install Adobe iFilter. The Help section within Indexing Services can provide assistance with a more sophisticated implementation.

D.   Install Adobe iFilter

Proper installation of Adobe iFilter will cause the "index" of Indexing Services to include PDF metadata and the searchable text of a PDF document.

Download and install the free Adobe iFilter 6.0 from: http://www.adobe.com

To rescan a directory within Indexing Services:

Re-create the index (rescan) without consequence. This is helpful in the event of hardware failure, data corruption, changing of the configuration (e.g.- changing the Properties to "Cached", after installation of Adobe iFilter, etc.)

To rescan a directory, click on Directories (under Repository)

Right click on the directory to rescan. Select All Tasks. Select Rescan (Full)

To test Indexing Services to see if it is functioning properly.

To test Indexing Services, determine what data is available within the PDF images in the Repository.

Are they searchable? (Use the find option of Adobe products)

What are the values of the metadata (Title, Subject, Author and Keywords)? (Use the File>Document Properties>Summary of Adobe products)

Select Query the Catalog. The following window will appear. See below.
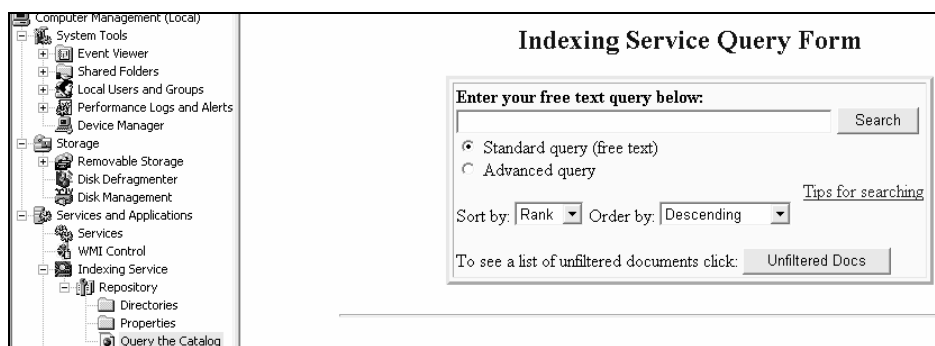
If the Repository contains a "searchable" PDF (containing text), put in a word contained in the PDF document, (use the default setting of Standard query, free text) and select Search. The document(s) should appear. Please refer to Help to review the extensive search options.

To test the metadata search, after properly installing Adobe IFilter and Indexing Services, enter a known value (word) within the Property DocTitle using the following syntax. See below. Replace "word" with the search word. Use the Advanced query option. Note: The contents of any PDF metadata can be viewed by opening the image and selecting File>Document Properties>Summary. Please refer to Help to review the extensive search options
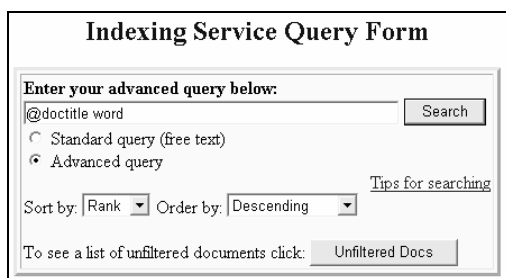
E.   Adobe Catalog Retrieval Overview

With a copy Adobe Acrobat 5.0, 6.0 PRO or 7.0 Pro (full version, not the free Adobe Reader) a very productive, multi-user, "imbedded" inquiry system can be setup. The "imbedded" feature will allow entry of sophisticated search rules, and not only "find" the documents, based upon metadata and content (if pdf documents are searchable), but will allow jumping from found "instances" (after displaying the exact position of the word WITHIN the document) to the next found "instance" (either in the same document or the next document) WITHOUT having to open the document. This is a very powerful feature, however, the index must be managed manually. (a manual update to the index periodically via a schedule is required). By contrast, Indexing Services, after setup, runs automatically and is kept up to date "real time".

Adobe Catalog Setup- Depending on the version of Adobe Writer (full version), the setup varies. The Adobe Help section relating to creating and managing a catalog will provide sufficient information for proper setup. When the catalog is properly setup and "shared", the free Adobe Reader can be used for powerful, multi-user inquires into the catalog.

F. PDRWin (Indexed Document Retrieval, client) and (Database Document Retrieval)

Launch PDRWin.exe by navigating to C:\Work area and demodata and double clicking PDRWin.exe   Select either Database Documents Retrieval or Indexed Documents Retrieval.

 (Indexed Documents Retrieval) is a desktop client based inquiry program. Requirements include a proper setup of Indexing Services and the program PDRwin deployed to each workstation. PDRwin will allow multi-user inquiry via "keyword" logic through the searching of the PDF text layer (using Free-text search) (if the document is made searchable via OCR) and the indexing data stored in the metadata (using All file properties) (Title, Author, Subject, Keywords) of a PDF document after running a vFILER workflow. Security is based upon the properties established for each folder and file. Careful planning is required to achieve the level of security demanded. Folders within the repository must be "shared" to allow multi-user inquiry. IDR setup:

In a "shared" network environment the catalog name is: query://fishereflow/Repository, where >>(fishereflow=computername that is running IIS (Internet Information Services)

 See below.

Database Document Retrieval a desktop client based inquiry program. Requirements include the availability of a backend database (.mdb or ODBC connection) to be properly configured.

See below.

Select Add Configuration. Browse to the location of the workflow. The default location is :C:\Work area and demodata\Workflows. A "connection" will be made. See below.
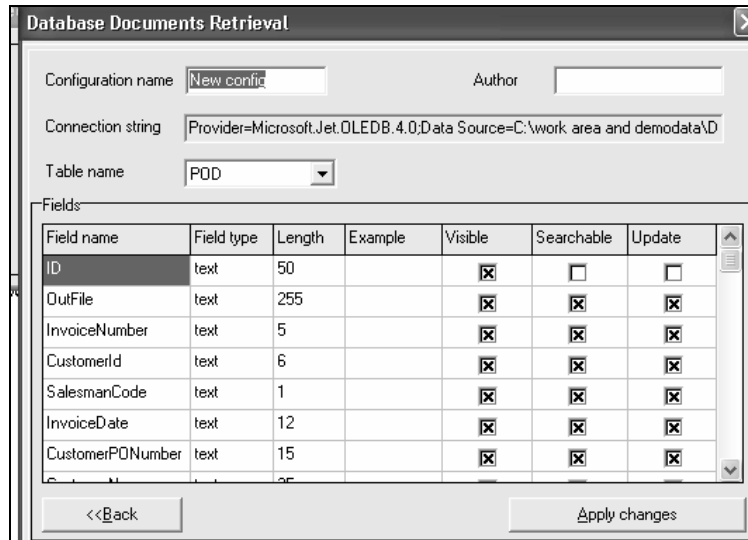
Change the configuration name to the desired name.

Change the Visible, Searchable and Update columns to the desired setting.

Add the Author name if desired.

Select Apply Changes. The new configuration will be saved. See below.

Select Search. See below.

Select the "Field" column to pull down the columns available. See below.

Select the "Condition" column to pull down the choices. See below.

Select the "Value" column to enter a search value. See below.

Select the Execute button to "find" relevant records. See below.

Double-click on the line or highlight the line and select View. See below.

For more sophisticated searches, use the Add Line, Clear Line, Add All Fields and Remove Unfilled lines.
See an example below.

Note: Structured queries can be saved to save time when entering search criteria.

V. Instructions for each workflow component

A. Capture from Email:

Overview-

This component requires Microsoft Outlook (not Outlook Express) as a prerequisite. The purpose of Capture from Email is to process unread, read (or both) email transactions through user-defined disciplined, systematic and structured procedures. Once an email transaction has been "captured", using optional sophisticated search techniques, the workflow can be designed to process attachments and email content in a series of user defined steps.

Select the component Capture from Email (checkmark should appear) during the design (Design button) of a new workflow to capture PDF documents from Outlook. See below.
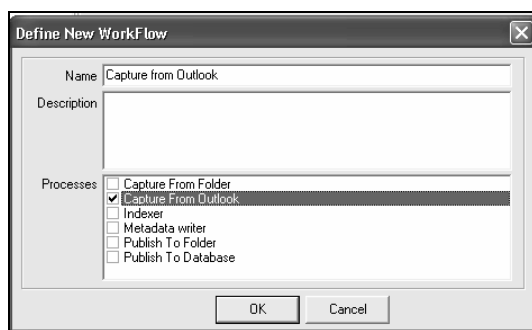
The Capture from Email component will appear and display the Outlook tab. See below.
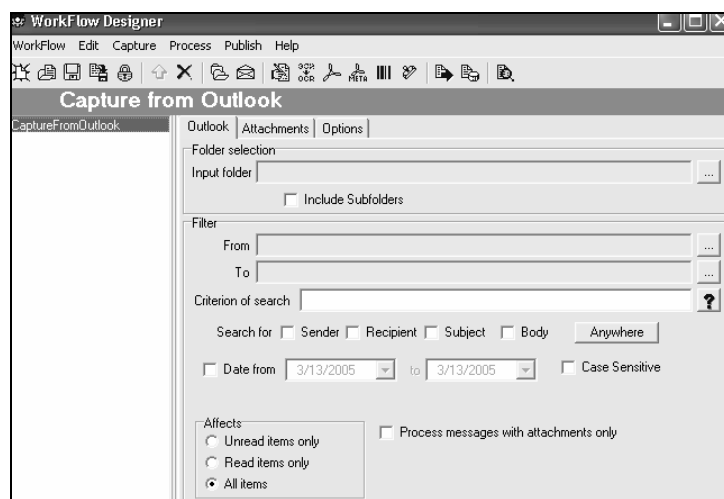
Use the ellipse to browse to the desired Outlook Input Folder.

Select the Include Subfolders option to have sub folders processed.

Use the Filter section to select a desired From or To and enter search rules for capturing only those specified transactions.

Enter a Search criterion. Select "?" for help. Additional Search help can be found in the Appendix.

Select a section of the email transaction to search or select "Anywhere".

Select a date range and indicate if the search is case sensitive.

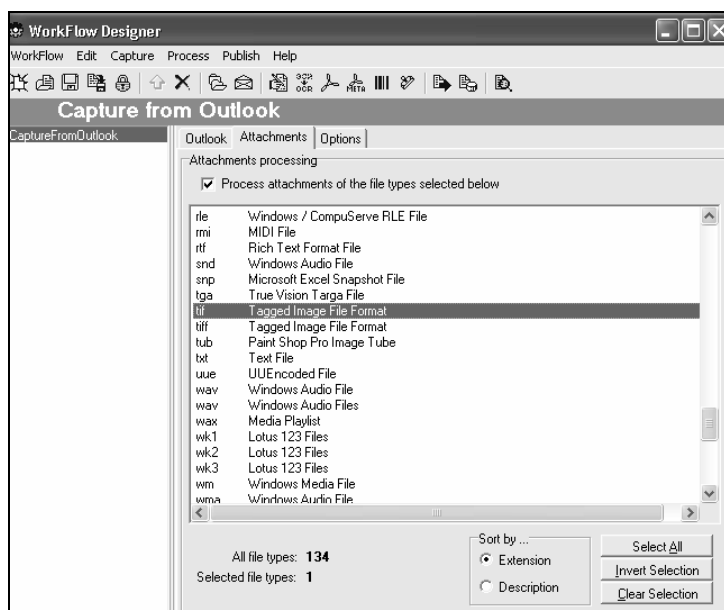Select to process transactions with attachments ONLY (option).

Select to process read emails, unread emails or both.

See below
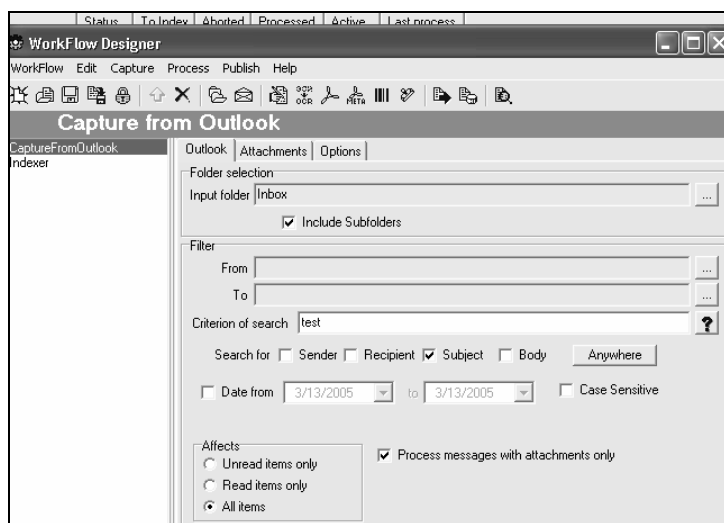
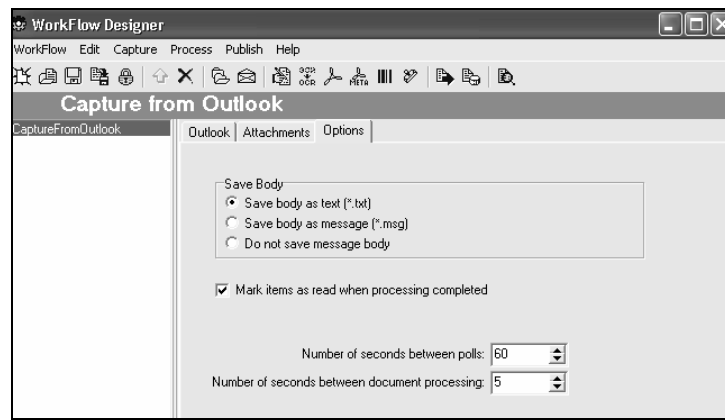Select the Attachments tab if visible. The PDF only version will NOT show this option.

Select the file type(s) by highlighting the file type or Select All.

Select the Options tab to choose the preferred method of processing the email body.

Mark transaction as, "read" or not, and optionally, alter the email polling sequences.

See below.

To exit, select the next vFILER component to configure (e.g. Indexer)

B.   Capture from Folder

Overview-

The Capture from Folder component is used to "capture" files from a designated location on the network. (folder and subfolders). The following screen will appear when the Capture from Folder component is introduced to the workflow.
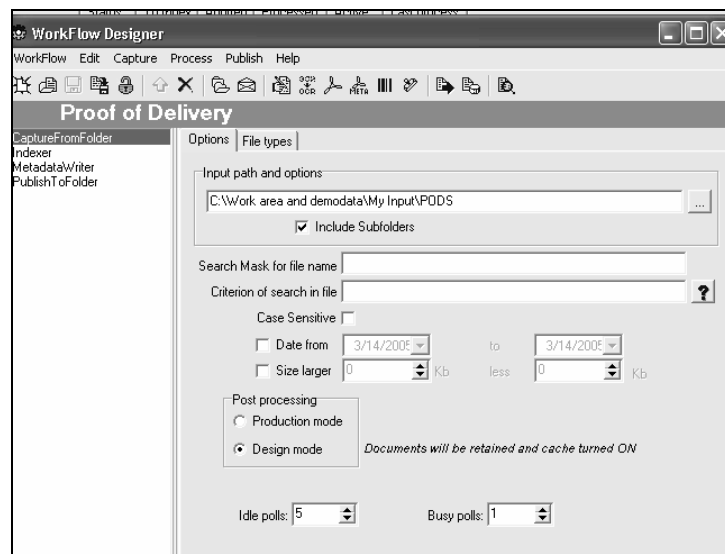
The designer can enter the path of folder to monitor or browse. Files within subfolders can also be captured. Various search options can be entered to capture only files with designated parameters. When testing a design use the Design mode. When performing production indexing, use the Production mode. Set the Idle poll for the number of seconds between attempts to capture additional documents from the folder. Set the Busy poll for the number of seconds between processing files.

The following screen will appear if the designer selects the File Types tab. Select the file type(s) or Select All for processing.
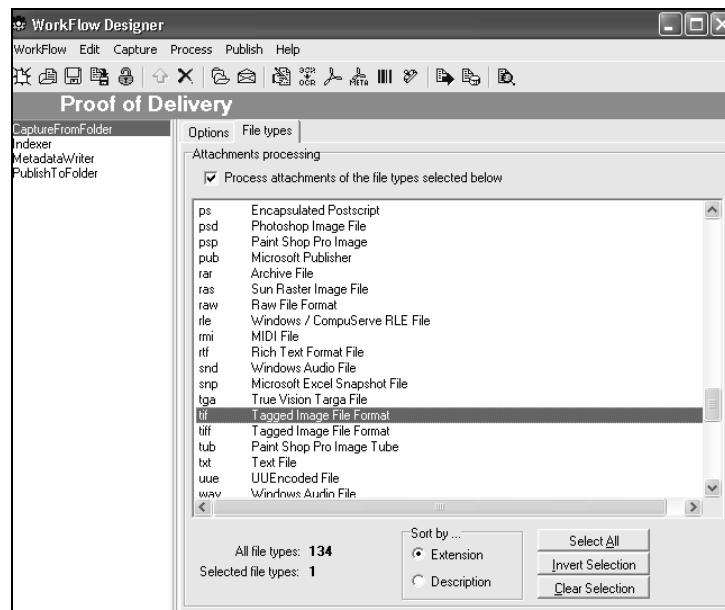
C. Indexer

The Indexer component is the most important component within vFILER. It defines the variables that vFILER will utilize to perform user-defined tasks. These tasks include: Metadata Writer, Convert to PDF, Publish to Folder and Publish to Database. The indexing component provides the capability for definition of variables, linking and creation of "lists", and interfacing to front end databases for purposes of validation and extraction.

To learn the basics of using the Indexer component, create a sample workflow using the instructions from Section II by creating a "Proof of Delivery" workflow.

This section will focus on the advanced features of Indexer.

After selection of Indexer, the following screen will appear.

* Use the Auto Start option to automatically display images captured files.

* Use the Auto Indexing option to automatically index the captured files (known as a "automated workflow"). An example of this feature is to use the "results" of zoned OCR or Bar Code Reader to automatically enter a "key" into the indexing process to create an operator unattended, validated workflow.

* Use the Auto Export option (in conjunction with Auto Indexing) to export files that were NOT validated by a database lookup to a user-defined export path. If a path is NOT designated, the workflow will be interrupted for non-validated files and will require manual indexing, exporting or correction of the database "key".

* Use the "Use First Record" option when duplicate records are found within the database, but the designer wishes to NOT have the Indexer stop and require a selection of the "correct" record. For purposes of this workflow, the first record contains sufficient data to process the file.

* Use the "Write All Records" options when duplicate records are found within the database and the designer wishes to have the file processed automatically to ALL found records. An individual record and corresponding image will be written for EACH found record.

Note: the Use First Record and Write All Records switches will be the default setting within the run time Indexer, however, the switch can be changed for each file processed.
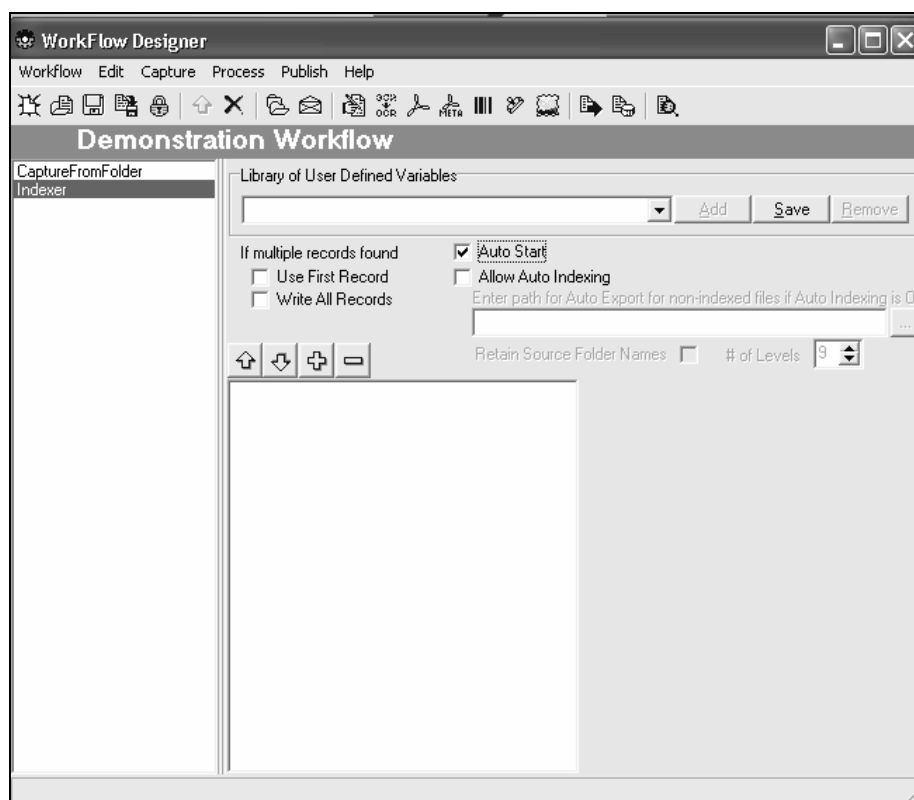
To Retain the "Source" folder structure when performing an Auto-export (during Auto-indexing), select Retain Source Folder Names option and select the number of levels of folders to retain. (max=9)

See below

Note: Auto-export is available only if Auto-indexing (whereby the "key" comes from a variable and NOT manually entered) is used. Retain Source Folder Name is available in the Auto-export feature is used.
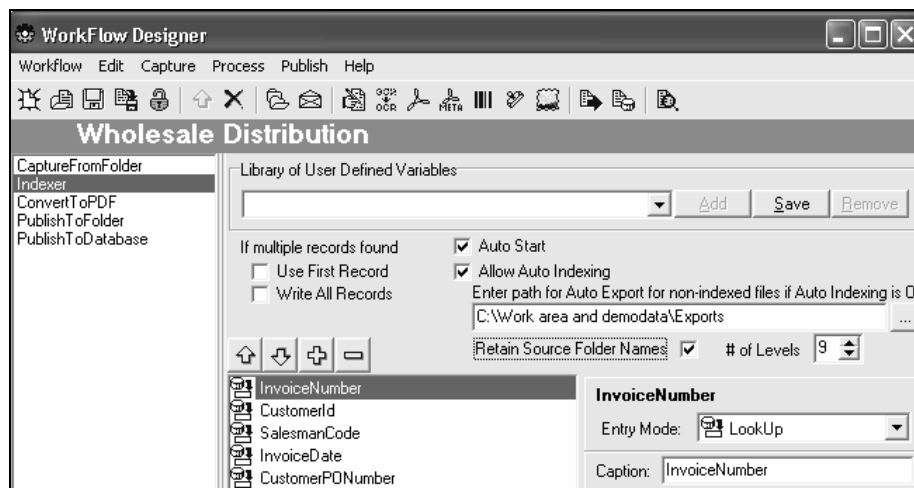
Using the Manual entry mode-
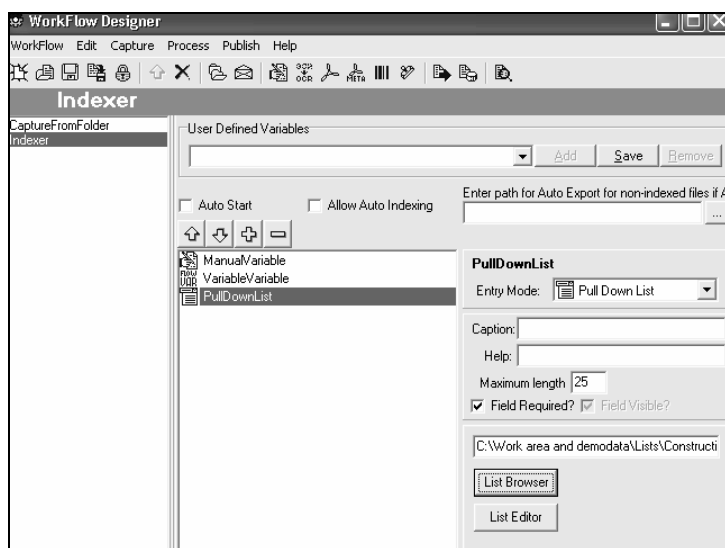
Select the Manual entry mode.

Optionally, enter data into Caption. The data entered will appear as a description of the variable during the indexing step.

Optionally, enter data into Help. The data entered will "pop up" when the cursor is positioned to this variable during the indexing step.
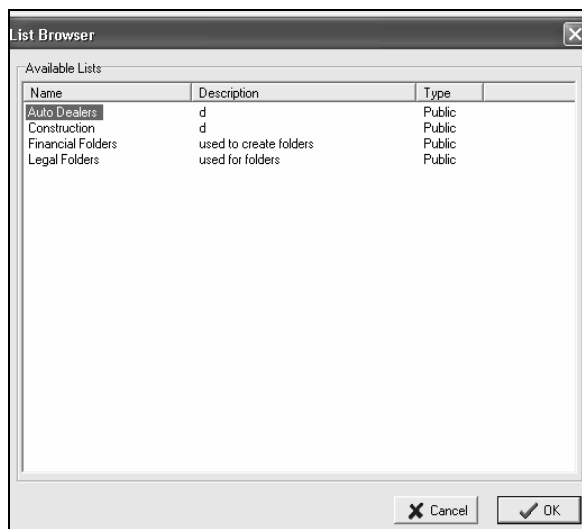
Optionally, change the size of the variable.

Optionally, select to make the variable required.

Optionally, if NOT required, select to make variable visible.

See below.
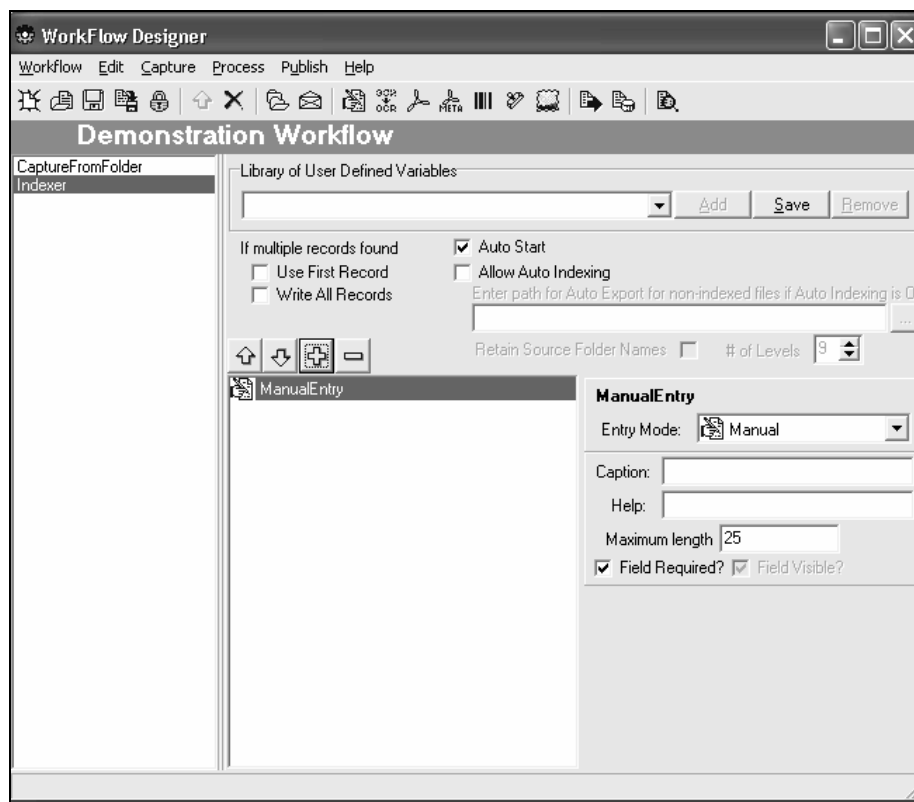
Using the Variable entry mode-

Select the Variable entry mode.

Optionally, enter data into Caption. The data entered will appear as a description of the variable during the indexing step.

Optionally, enter data into Help. The data entered will "pop up" when the cursor is positioned to this variable during the indexing step.

Optionally, change the size of the variable.

Optionally, select to make the variable required during indexing. Check mark indicates required.

Optionally, select to make the variable visible during indexing (only available if not required). Check mark indicates visible. See below
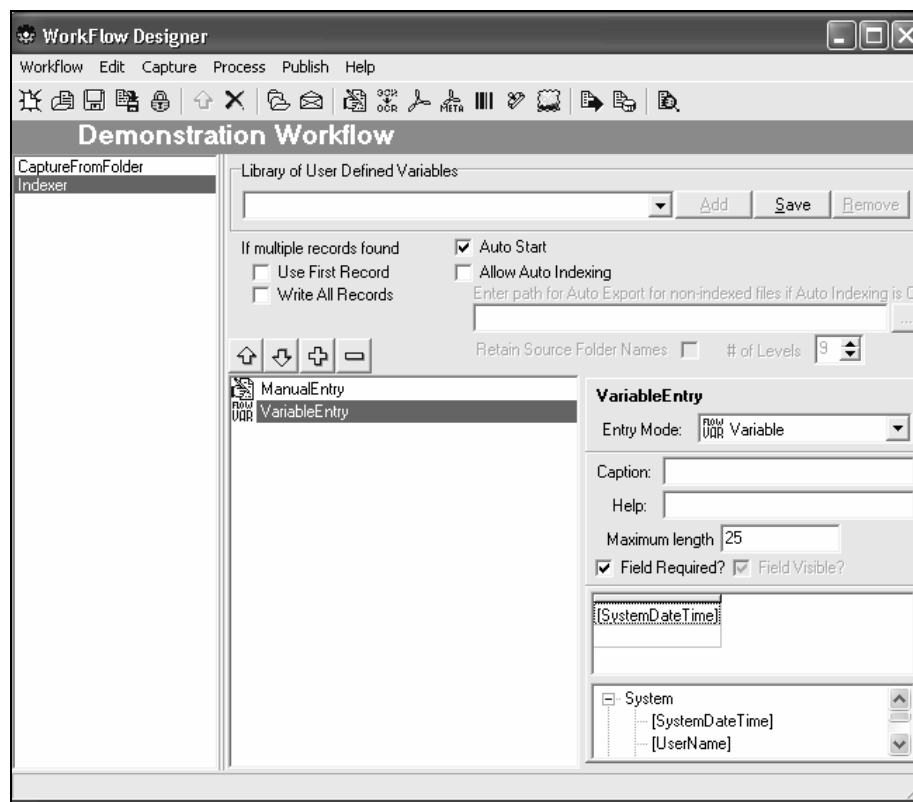
In the above example, the SystemsDateTime variable was chosen from the System variables.

The designer can use this feature to capture data from any variable created throughout the workflow.

Using Pull Down Lists entry mode-

Select the Pull Down List entry mode.

Optionally, enter data into Caption. The data entered will appear as a description of the variable during the indexing step.

Optionally, enter data into Help. The data entered will "pop up" when the cursor is positioned to this variable during the indexing step.

Optionally, change the size of the variable.

Optionally, select to make the variable required during indexing. Check mark indicates required.

Optionally, select to make the variable visible during indexing (only available if not required). Check mark indicates visible. See below

Lists are stored in C:\Work area and demodata\Lists in .xml format.

Select the List Browser button to view and select available lists. See below.

Select List Editor to create an .xml lists from .txt or database files or run the stand alone program called DPLA.exe located in C:\Work area and demodata. See below.

Using the Constant entry mode-

Select the Constant entry mode.

Optionally, enter data into Caption. The data entered will appear as a description of the variable during the indexing step.

Optionally, enter data into Help. The data entered will "pop up" when the cursor is positioned to this variable during the indexing step.

Optionally, change the size of the variable.

Optionally, select to make the variable visible during indexing. Check mark indicates visible.

See below
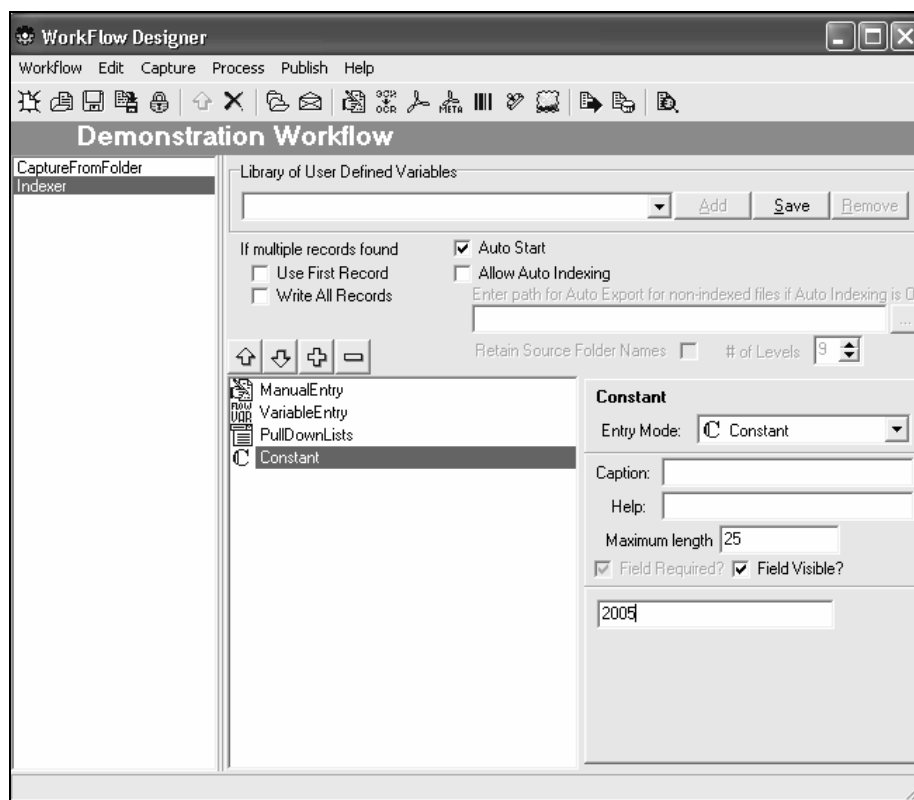
The constant value "2005" was entered in the example above.

Using the Lookup entry mode-

The database lookup feature will interface with a front end database. A front end database is used during image processing to facilitate the indexing of documents. The front end database will allow for validation and extraction of data. (Note: A backend database is updated as a result of document processing. A backend database is used for retrieval purposes.) The following discussion will be related to making a front end database connection; however, the backend database can be updated with the results of accessing the front end database.

Select "Lookup" as an entry mode. The Key Wizard and Settings buttons will appear. See below.
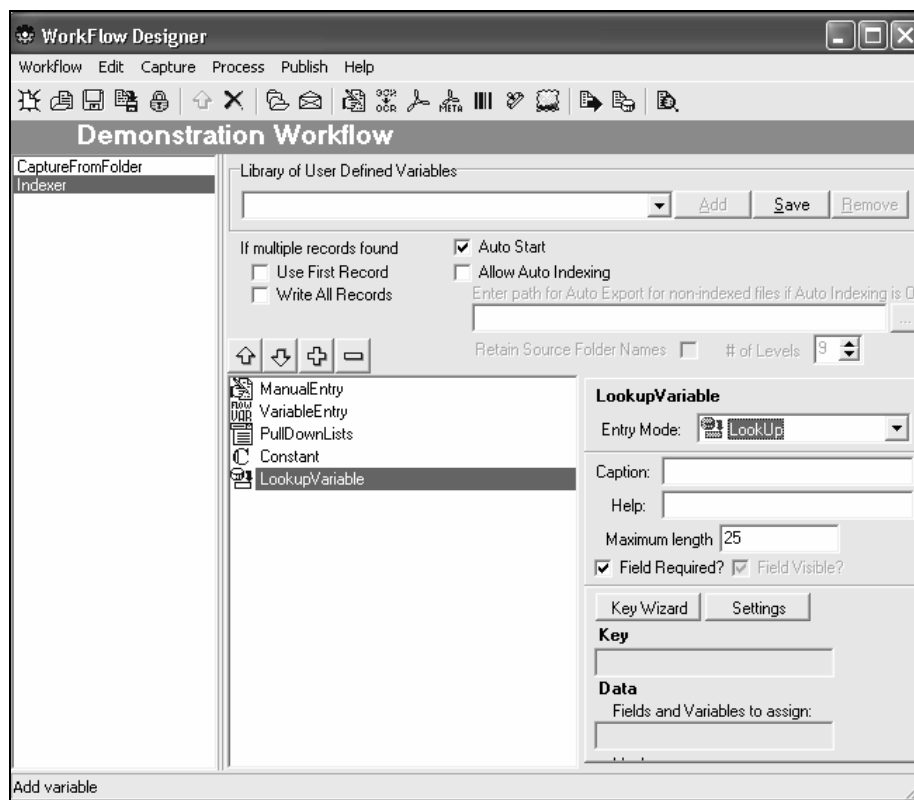
The best method to defining database connections is to define the "keys" first. Multiple keys may be required to cross reference the data within the database.

Use the Key Wizard to define "key(s)". A key is defined as the data (variable) used to retrieve a record from a database.

After selecting Key Wizard the following screen appears. See below
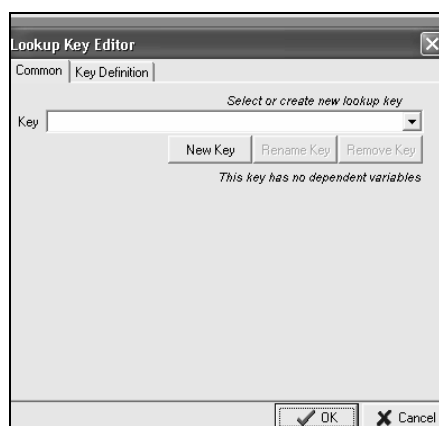
There are two database connection tab options: Common and Key Definition. The following instructions explain the use of the Common tab. Refer to the Key Definition section for instructions on that tab

Common tab-

Select New Key to define a key. The following screen appears. Enter e.g. "KInvoiceNumber" Use a "K" as a suffix to prevent a UDV (User Defined Variable) and the "key" name from being the same. See below.
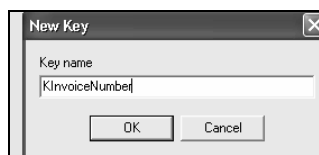
"KInvoiceNumber" will be a key that will de defined. Select OK. See below.
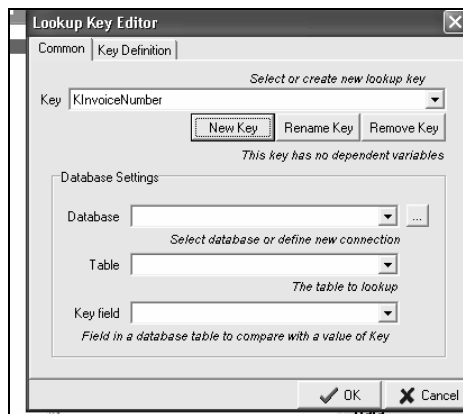
Select the browse (ellipse) button for Database (or select from a database already defined, using the pull down option) See below.
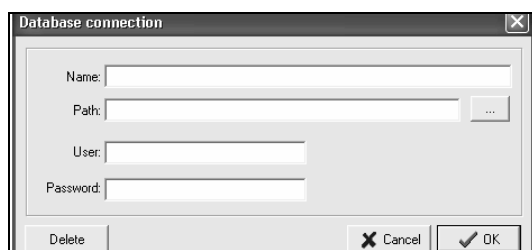
Select the Jet option to access a Microsoft Access database (.mdb)

Select the ODBC to access any ODBC connection.

Enter a database name, e.g. Northwind. Browse to the database using the ellipse button.

Optionally, enter User and Password. Select Delete to delete a connection. Select OK. See below
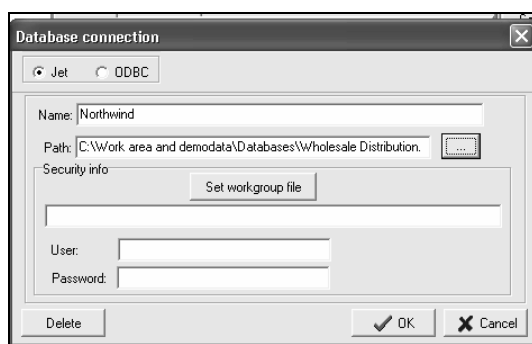
A database connection will be established. Select a table "Transaction History". See below.
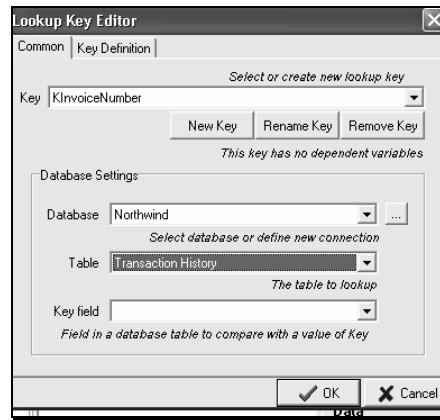
Select the pull down option to display the available columns within the database selected. See below.
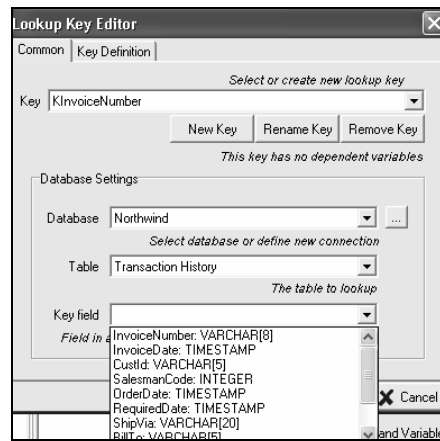
Select InvoiceNumber as the column to use for this key.   See below.
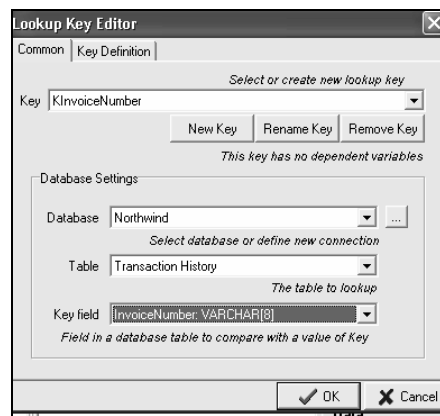
Select OK to return to the Indexer component to define the remaining keys using the Key Wizard.

Key Definition tab-

The Key Definition tab is only used when the key is NOT manually entered.   vFILER can process documents automatically by using data from OTHER variables as the key.   See the Appendix for designing automated workflows.   An example would be using the

OriginalFilename variable from the Capture from Folder component to "feed" the Indexer with the key value or the results of a zone OCR or Bar code recognition.

Select the Key Definition tab for the key being defined.

Select the "+" button to enlarge Capture FromFolder.

Select the variable OriginalFileName with a mouse click.

In a separate step, "drag" the variable to the Key Value box. See below.
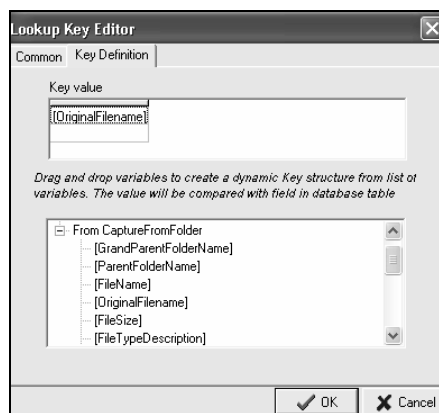
After the "keys" have been defined, the designer must "map" the UDV (User-defined variables) with the database columns. This is done by selecting the Settings button. See below.
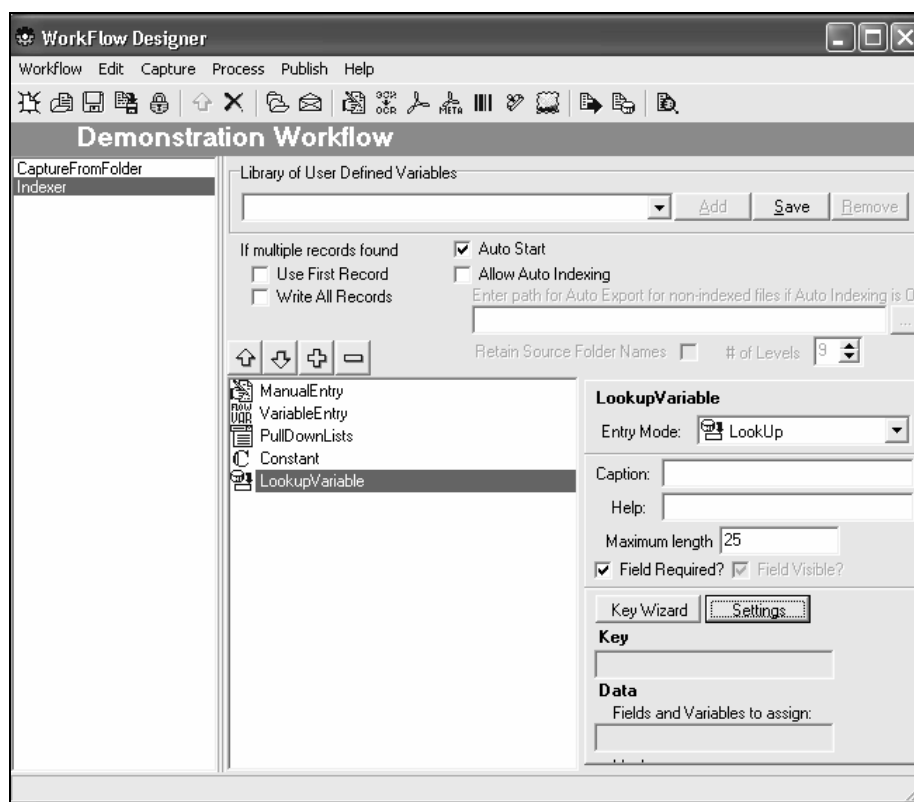
The following screen will appear.
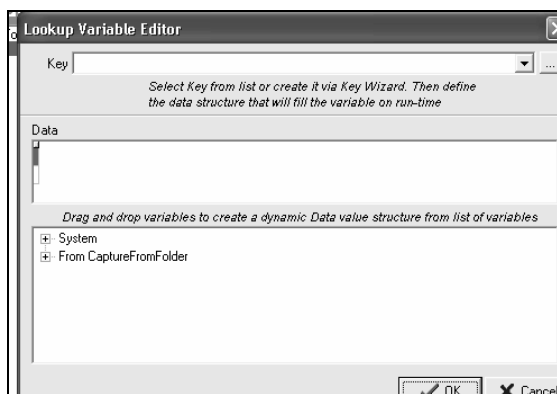
For **each** Lookup variable, select the key to use from the Key pull down list.

Note: the variable MUST be defined as a "Lookup" variable for any data extracted from the front end database and "mapped" appropriately.

Select the "+" to enlarge the database table name "Transaction History" to show available columns. See below.
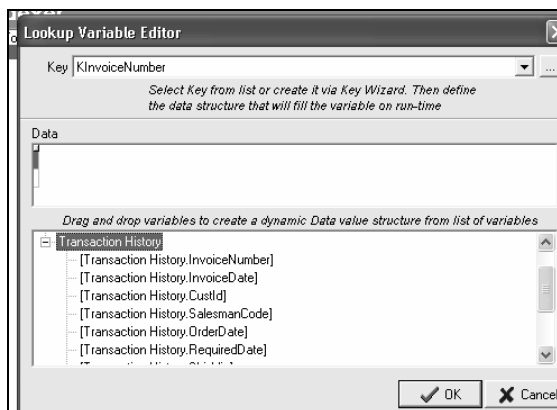
Select the database column name that corresponds to the Lookup variable, e.g. Transaction History InvoiceNumber. The database column name will appear in blue. In a separate step, "drag" the variable into the data box. See below.
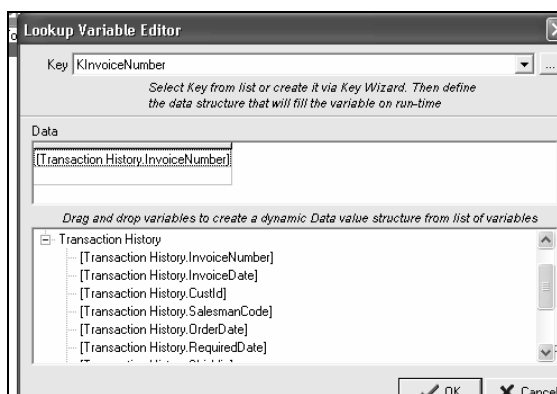
Select OK to return to Indexer to define the Settings for all Lookup Variables.

Note: When using an ODBC connection, it is advisable to create a USER DSN for the workstation using Windows, Control Panel, Administration Tools, Data Sources (ODBC). vFILER will directly connect to a successfully configured USER DSN.

D. Metadata Writer:

Overview-

The following screen will appear when you select Metadata Writer. This component is used when the "source" image format is PDF and the repository image is PDF. The designer can populate the PDF metadata with data accumulated during workflow processing. The metadata can then be searched by using the PDRwin (client). If the "source" document is a TIF format, the correct component to populate metadata is Convert to PDF.
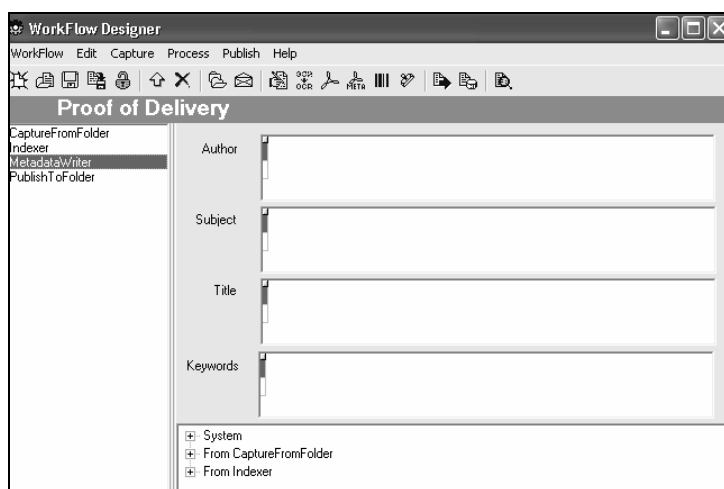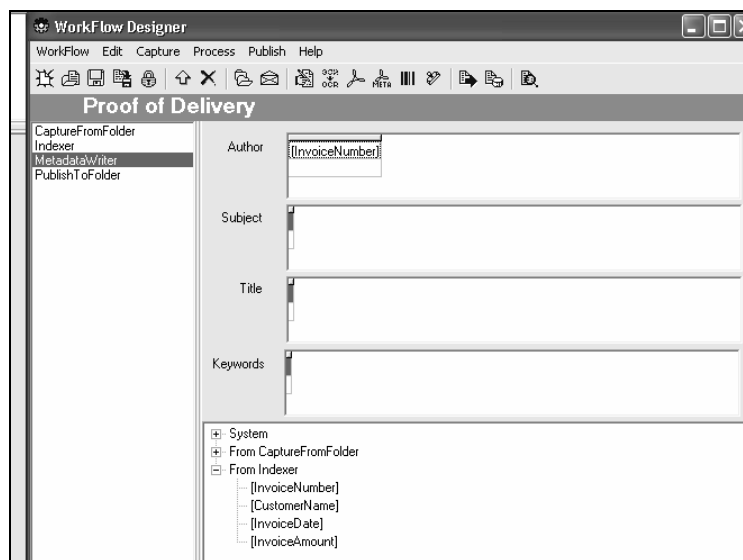

Expand From Indexer by selecting the "+". The variables added during the Indexer step will appear. See below

Highlight InvoiceNumber (in example below) by clicking on it.
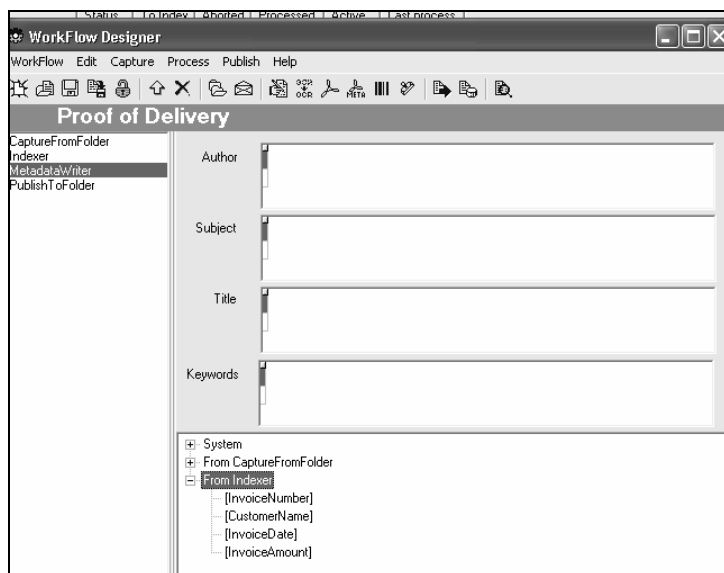
In a separate operation., "drag" the variable to the metadata field called Author and release. The variable name should appear in the property.

Repeat these steps for the following variables: InvoiceNumber to Author, CustomerName to Subject, InvoiceDate to Title and InvoiceAmount to Keywords. See below.
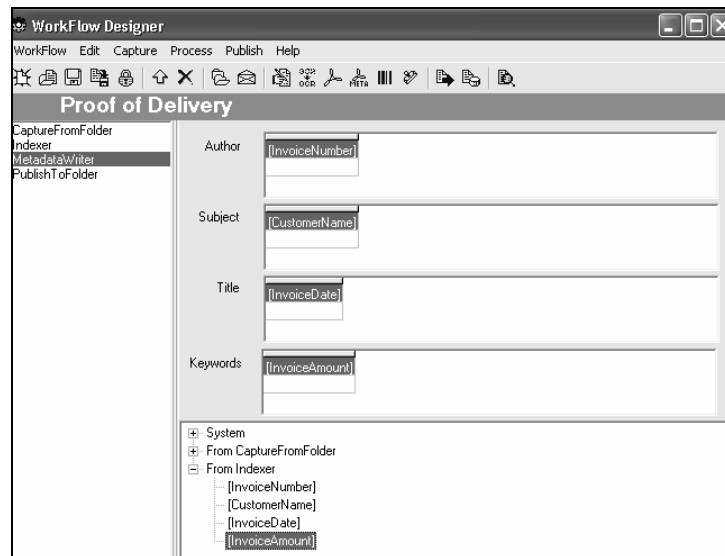
Each metadata variable (e.g. Subject) allows 256 characters. Indexing Services will "index" the variables irrespective of the location. Multiple fields within a metadata property should be separated by the "pipe" character. (the character above the "\") See below.
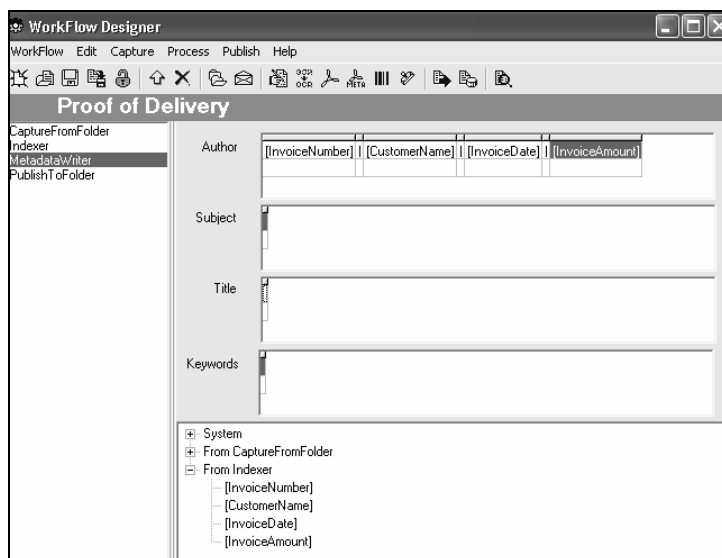
E.   Convert to PDF

Overview-

The Convert to PDF component is used when the source file is a Tif image. The process and procedure is exactly the same as Metadata Writer. Review the instructions for Metadata Writer.

F.   Zone OCR

Overview-

The Zone OCR component is used to "capture" data from Tif images ONLY through the use of OCR (optical character recognition). The captured data becomes variables that can used throughout the workflow. Zone OCR is useful in creating workflows that use the captured data as a key to validate against a front end database.

Select OCR from the main Process pull down menu. See below.
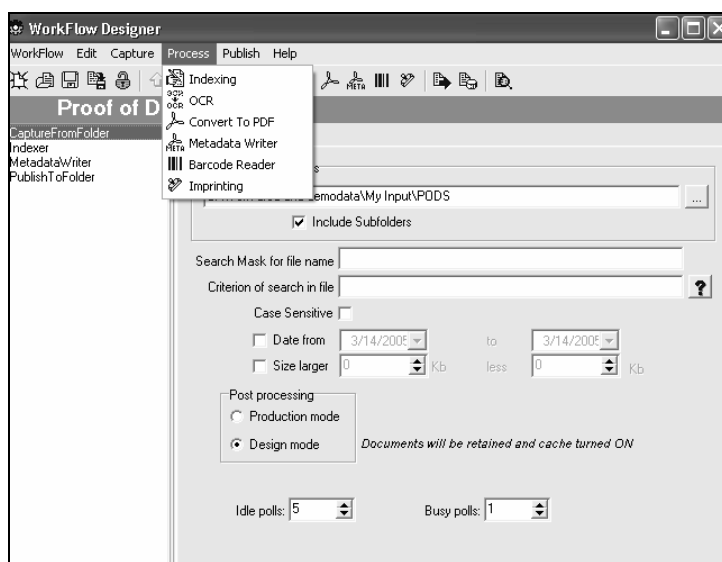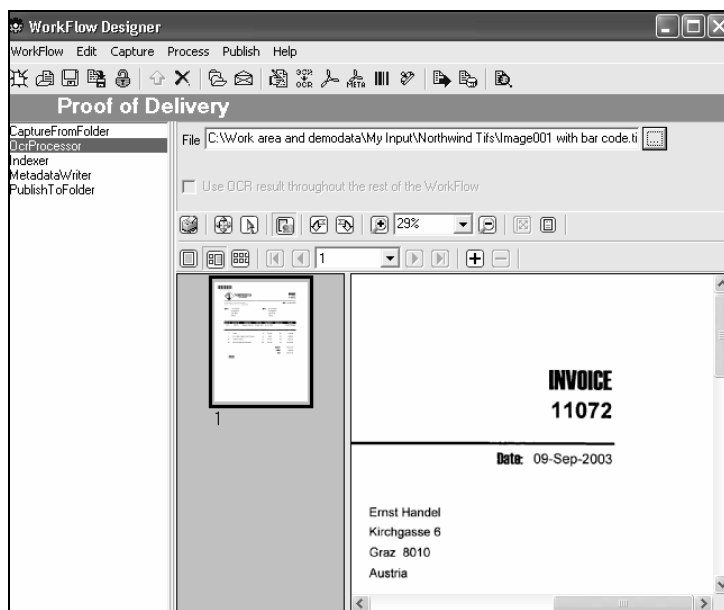

The following screen will appear.
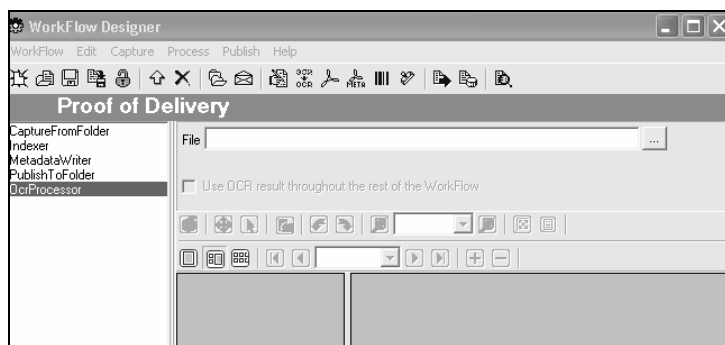
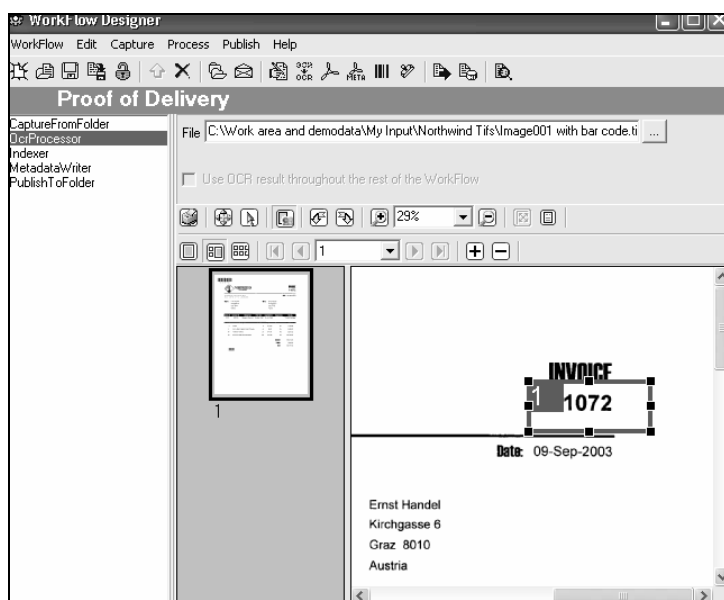Use the Up Arrow icon to move the OCR component up above Indexer. See below.
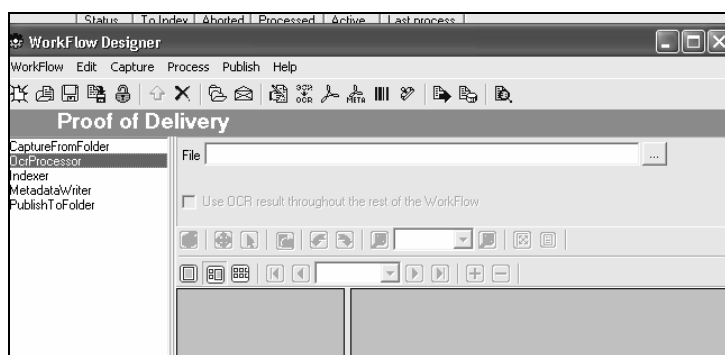
Enter a path or browse to a Tif image "template" location. See below.
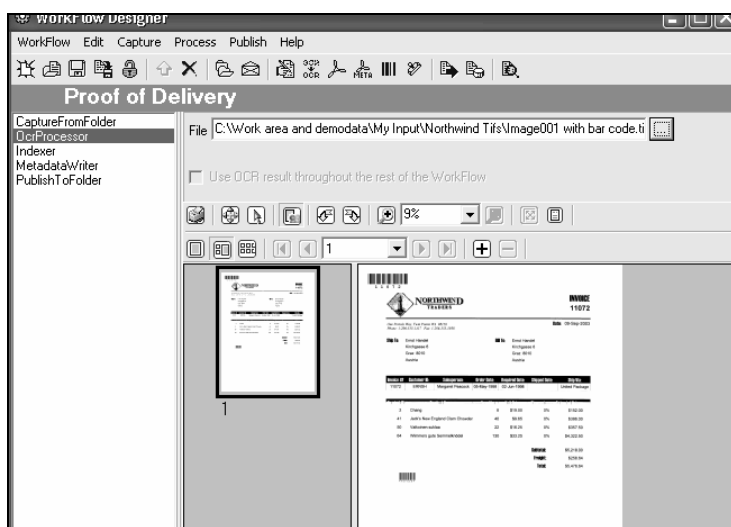
Use the "+" button to the left of "9%" to "enlarge the image. See below.

Use the "+" to the right of page number to draw an OCR zone. See below.

Use the "-" button (to the right of "+") to remove any OCR zones.

Note: the variable name for zones are Zone1, Zone2, etc.

G.   Bar Code Reader

Overview-

The Bar Code Reader component is used to "capture" data from a 1D or 2D bar code (depending on the version). A special license is required for this component. Only Tif images, (Group 3 or 4) can be processed with this component. The captured data becomes a variable that can be used throughout the workflow. Bar Code recognition is useful in creating workflows that use the captured data as a key to validate against a front end database. The Bar Code component also includes the capability to automatically "split" documents via the presence of a bar code.

Select Bar Code Reader from the Process pull down menu. Use the Up Arrow to place the bar code component in the correct sequence of the workflow. The following screen will appear. See below.
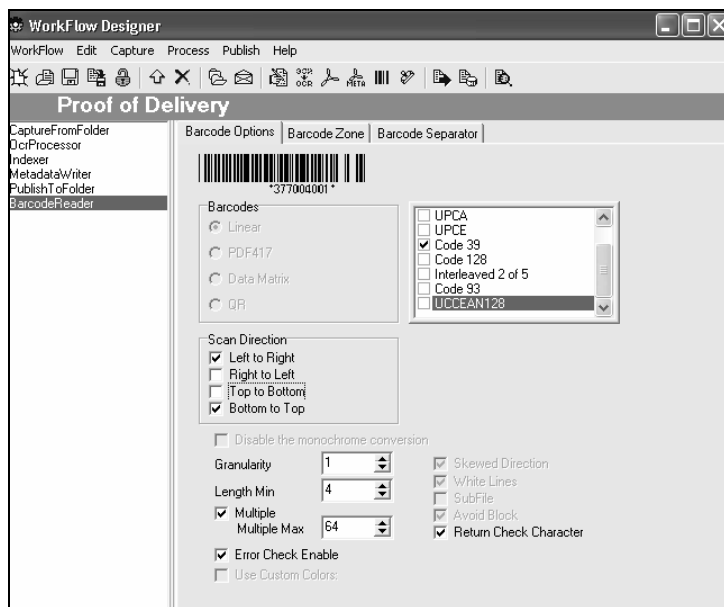

Select the bar code format required. Select the best method to "find' the bar code. Select Bar Code Zone. Enter the path or browse to a bar code template (Tif image format). See below.
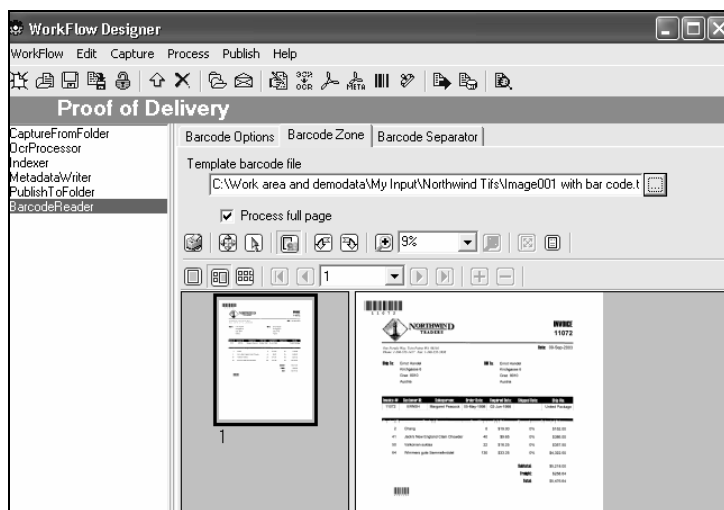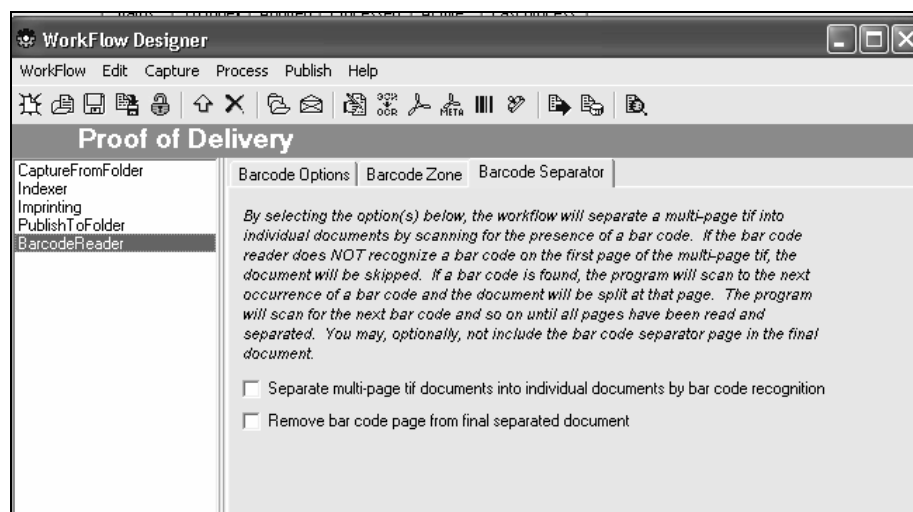

Remove the check for Process full page if a zone bar code is required.

For zone bar code: enlarge the image to desired percentage, select the page to be "scanned" for bar codes and select the "+" to define the zone. See below.
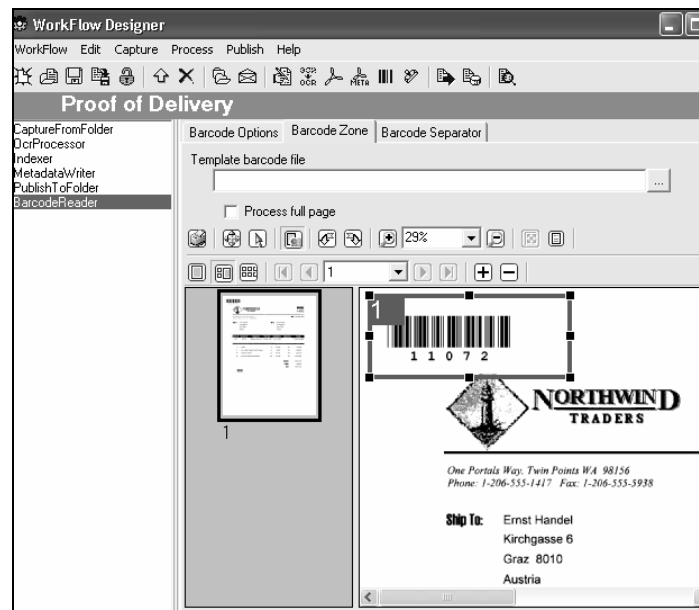
Bar Code Separation- the following screen will appear if the designer selects the Bar Code Separator tab.

The presence of a bar code, in a designated position, will "trigger" the separation process.

Normally, when using this component, a workflow is designed to separate the multi-page TIF document into smaller TIF documents directly into a folder. Another workflow designed to process the split documents is running at the same time.

H.   Imprinting

Overview-

The Imprinting component is used to "imprint" digital information on a Tif image. The designer can choose the "text" to print, etc. and the position on the document.

This component is under development.

I.   Publish to Folder

Overview-

The Publish to Folder component is used to create dynamic Windows folder and file structures. Careful planning is required to accomplish the document management goals. The designer should have a working knowledge of Microsoft folder and file structures.

See Section II – F. Design- Publish to Folder to learn how to use this component.
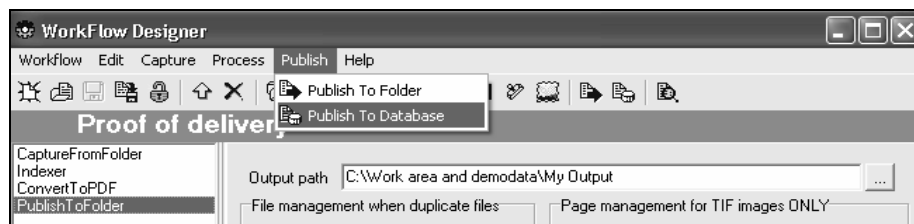
J.   Publish to Database:

vFILER provides the capability to create and update a backend database using .mdb (Access Jet) or ODBC compliant database. This component also allows creation of the dynamic folder and file structures and the creation of tables and columns for the backend database.

The following instructions will use the Proof of Delivery workflow that was created in Section II as a foundation. A Publish to Database component will be added.
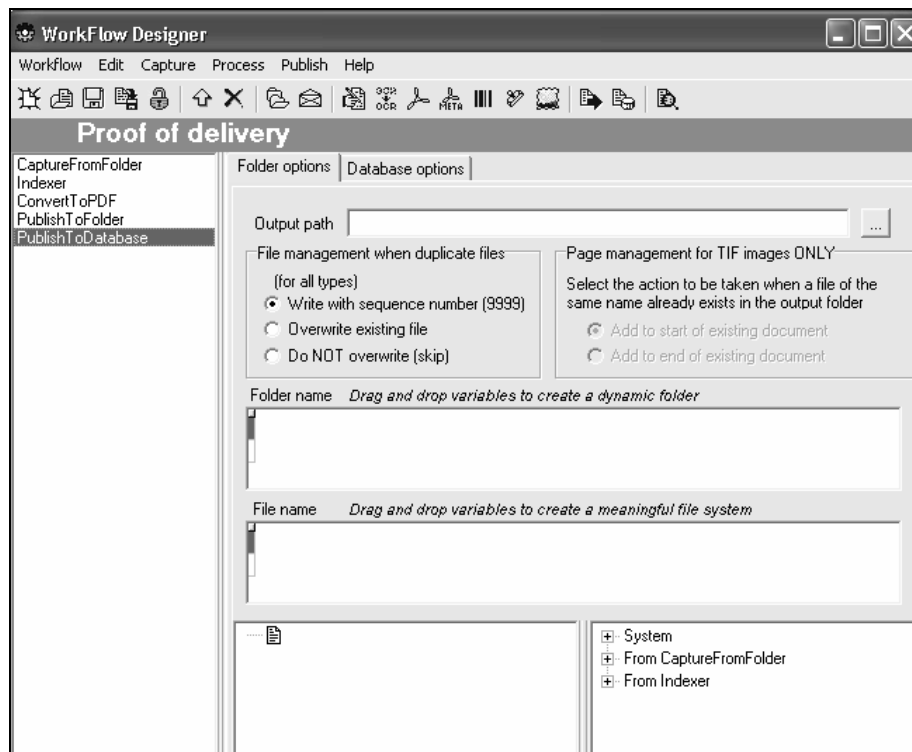
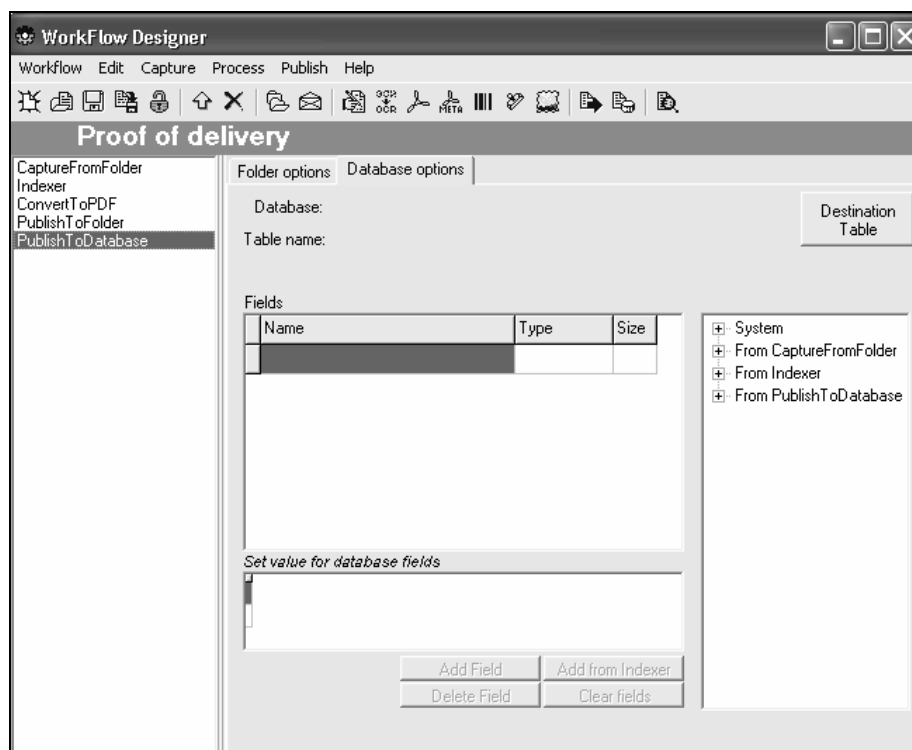LOAD the Proof of Delivery workflow. See below.
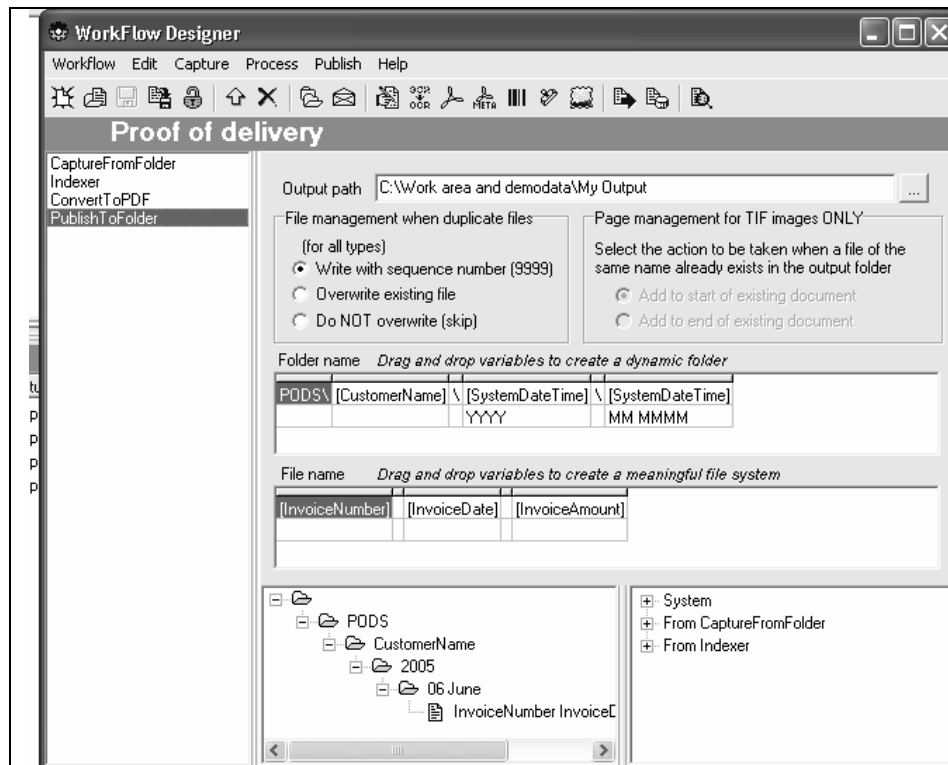
Select Publish to Database from the Publish pull down menu. See below.

The Publish to Database screen will appear. See below.

Use the Publish to Folder instructions for completing the Folder options tab.

Select Database options to complete the database connection.

The following screen will appear. See below.

Select the Destination Table button to define the destination table. See below.
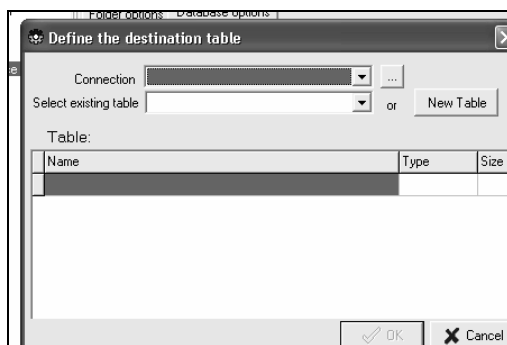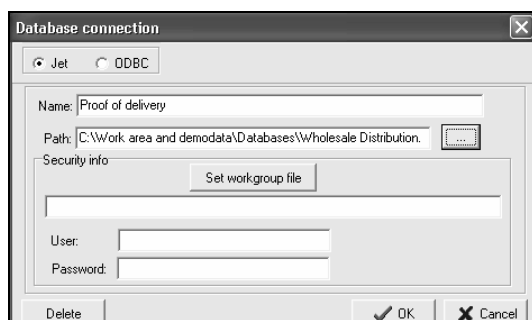
Select a database connection from the pull down or select the ellipse button to the right to create a new connection. See below..
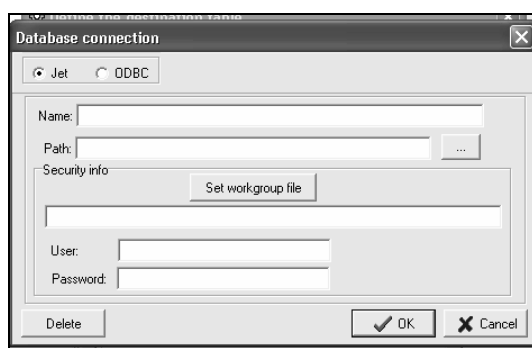
Select Jet (Microsoft Access) or ODBC.

Enter the database Name.

Enter the path or browse to find the database. The following example shows connecting to the Wholesale Distribution.mdb database found in C:\Work area and demodata\Databases. See below.


Enter security data, if required. Select OK. A connection will be made. See below.

Select the New Table button to create a new table or select from the existing tables using the pull down list. With a new workflow, normally the designer would select New Table to have vFILER create the table for processing. vFILER can also be used to update a table that exists. Note: select the table from the pull down list.

If New Table is selected, the following screen appears. See below.
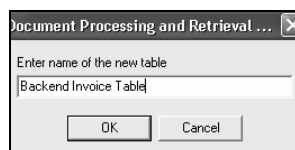
Select OK. The following screen will appear. Select OK. See below.
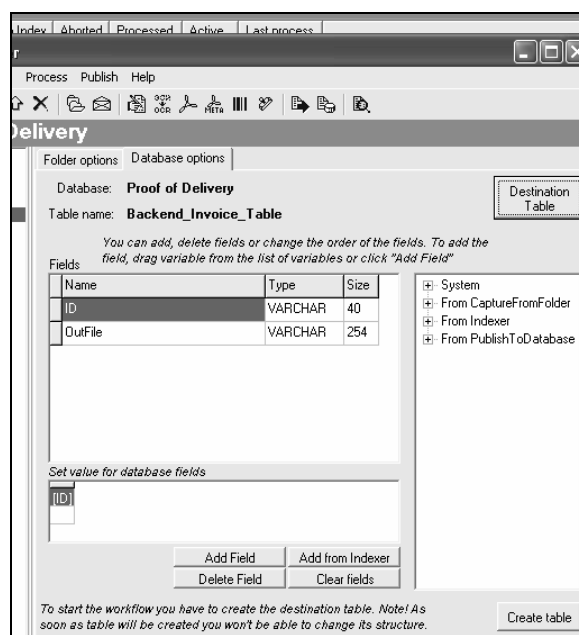
The columns ID and OutFile are created automatically. The ID column is used to create a unique file identifier. The OutFile is the column that contains the "path" of the file from the Publish to Folder tab.
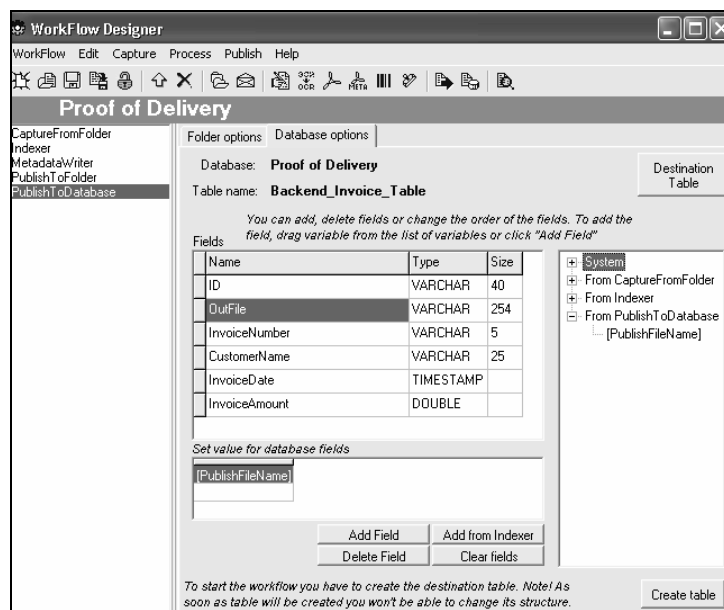
To create the columns automatically from variables defined in Indexer, select "Add from Indexer". See below.
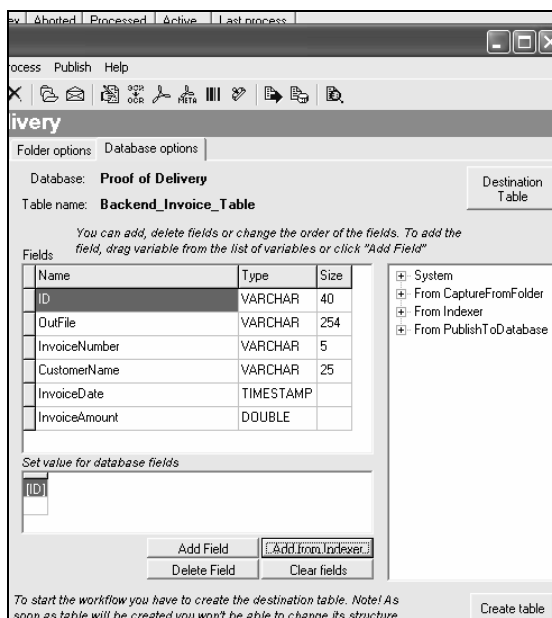
Highlight each variable to see that the variables are "mapped" to the database automatically. See below "InvoiceNumber"
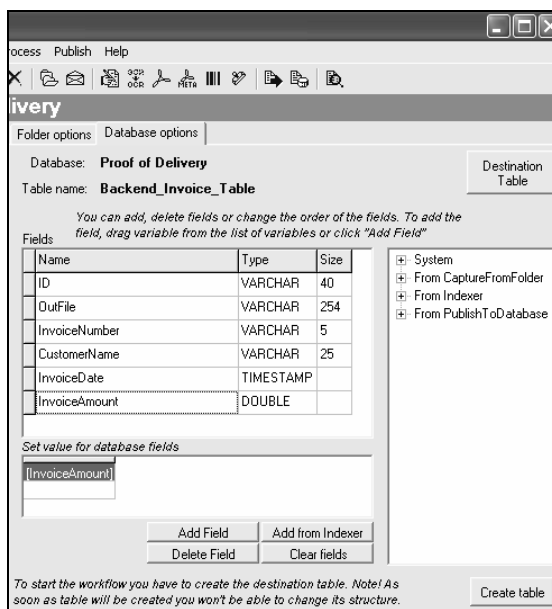
Notice that OutFile contains the variable PublishFileName. See below.

Any variables on the right can be expanded and dragged into the Set Value for Database fields section for each database column.

Columns can be defined and added. Add Field button.

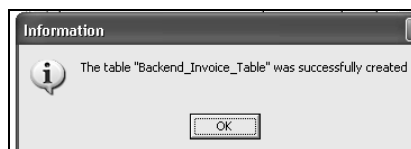Columns can be deleted. Delete Fields button.

Columns can be cleared. Clear Fields button.

When completed, select Create Table button, the following screen will appear. See below.
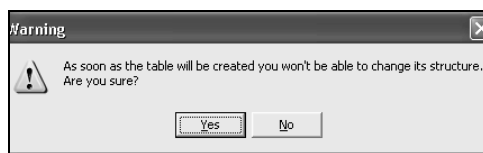
If the table is correct select Yes. If more changes are needed select No.

The following screen will appear if the table was created successfully.

Note: If the designer did NOT create a new table, but rather selected a table that exists, the columns cannot be changed, however, the columns can be "mapped" to appropriate variables on the right. The PublishFileName variable must be mapped to a column.

Using the program, PDRwin (Database Documents Retrieval-client) or DDR (web based using IIS) multiple users can retrieve documents by any user-defined database column.

VI. Main launch options:

A. RUN

Select the RUN option to execute the workflow(s) that have been added to the execution list by the ADD button. The series of user-defined operations will begin. See Section VI-Using the RUN function.

B. STOP

Select the STOP option to discontinue the execution of the selected workflow.

C. ADD

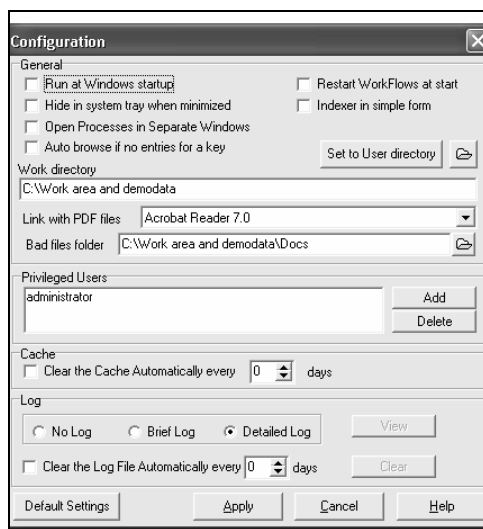Select the ADD option to load a selected workflow into the execution list.

D. DELETE

Select the DELETE option to remove a selected workflow from the execution list.

E. DESIGN

Select the DESIGN option to design a new workflow or to modify an existing workflow.

F. OPTION

Select the OPTION option to modify the vFILER configuration. See below.

G. LOG

Select the LOG option to view an audit trail of workflow processes.

H. CLEAR

Select the CLEAR option to:

- clear Capture from Folder cache (used to prevent duplicate processing of captured documents within a folder).

- clear Capture from Email cache (used to prevent duplicate processing of email transactions).

- clear captured images within the C:\vFILER\Captured folder. The password "CLEARJOBS" is required to prevent inadvertent deletions of images.

I.   ABOUT

Select the ABOUT option to view the number of remaining launches and documents to publish.

VII. <u>Section VI - Using the RUN function</u>

Following the selection of the RUN function, the series of user definable steps will begin to process. Files will be captured by either the Capture from Folder or Capture from Email and placed into the C:\Work area and demodata\Captured folder for processing. In an automated workflow, functions such as Bar Code Reader or Zoned OCR are normally the next functions used for purposes of generating a "key" that is used during the validation step of a database lookup. See Section VII- Appendix A) Creating automated workflows. Depending on the switch settings within the Indexer component; Auto Start- if ON, image will display automatically, Auto-Index- if ON, the operator will NOT be required to "approve" a valid database lookup, Auto-Export- if ON, files that are NOT validated during the Auto-Index process are automatically exported to a user defined path to allow for a truly automated workflow. Users should always reconcile the "captured" file counter with the "published" counter. Discrepancies between the counts should be further reconciled with the export folder, and the files should be reviewed to determine the reason they were not processed.

Select the RUN option you wish to use. (see below)
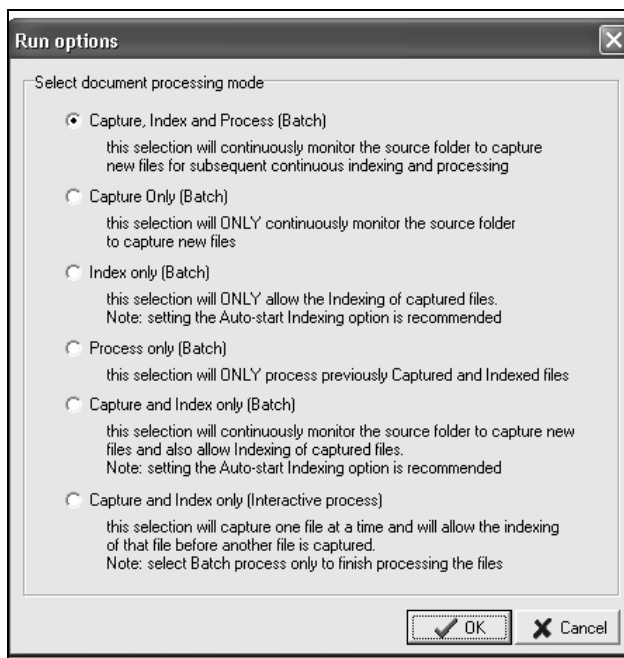
"Automated workflows" should use the Capture, Index and Process option.

In large volume users, (non-automated), the Capture and Index only (Interactive process) can be useful to "control" the capturing of documents.

Experiment with each option to determine which is most useful in your operating environment.

A.   Using the run time Indexer

The Indexer is launched two ways. 1) If Auto start is "checked" in the Indexer component with Designer, the captured image will display automatically. 2) If Auto start is not "checked" in the Indexer component within Designer, the operator must double click on the displayed, captured file. (on right, under "To Index" column)

The Indexer displays the file (see below). For maximum document processing functions, the source documents should always be TIF documents.
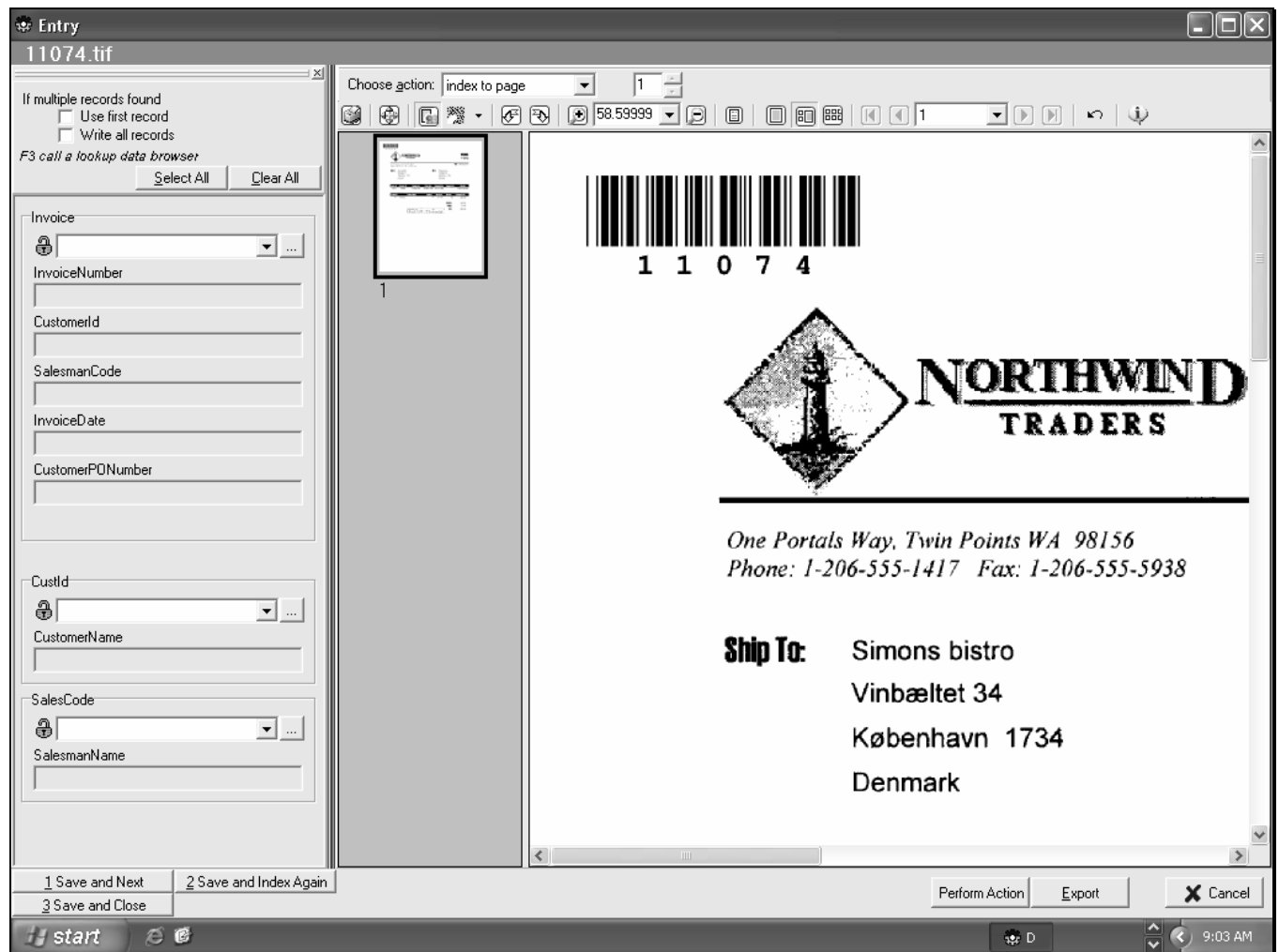

* Use the "Use First Record" option when duplicate records are found within the database, but the operator wishes to NOT have the Indexer stop and require a selection of the "correct" record. For purposes of this workflow, the first record contains sufficient data to process the file.

* Use the "Write All Records" options when duplicate records are found within the database and the operator wishes to have the file processed automatically to ALL found records. An individual record and corresponding image will be written for EACH found record automatically.

* Use the Select All option to "lock" all fields (watch the padlock close for all fields). This will cause the data in all fields to be retained for the next file.

* Use the Clear All option to "unlock" all fields (watch the padlocks open for all fields). This will cause the data in all fields to be NOT retained for the next file.

* Click on the padlock to open or close it to retain or not retain the data for the next file.

* Select the "pull down" option for each "key" to see the previous key processed.

* Select the Save and Next option (or Alt 1) to process the file and continue processing.

* Select the Save and Index Again (or Alt 2) to process the file, retain the file on the screen and "index" the same file again. Note: a separate file will be written for each.

* Select the Save and Close option (or Alt 3) to process the file and terminate the run time Indexer.

Image Controls (above the image, from left to the right) see below.
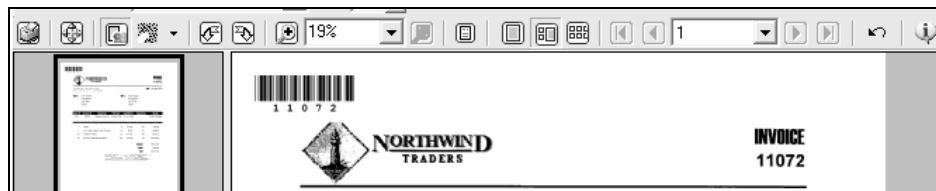
Front left to right….

Select Print Icon to Print file.

Select Move image- under development

Select Toggle grayscale

Select Remove noise (despeck, select sub-options)

Select Rotate image left

Select Rotate image right

Select "+" to zoom in

Select or enter % to zoom

Select "-" to zoom out.

Select Best Fit

Select Show page only (no thumbnails)

Select Show page with thumbnails

Select Thumbnails only

Select Start page

Select Go back one page

Select enter page number

Select Go forward one page

Select End page

Select Restore image

Select Help- under development

Page Processing (above image controls, see below)

Choose action:

Index to Page- this function is used to perform "on-line" separation and indexing of multi-page tiffs. Position the cursor on the thumbnail of the LAST image of the "set" of pages you want to separate and index. Notice the page number changes to the right of "Choose action". Select Perform Action (see below). The pages selected will be separated and allow indexing.

When completed with entering all indexing information, select Save and Continue (see below)

Select Exclude pages from and to in order to delete pages from this file.

Select Extract pages from and to in order to index only those pages

Select Move current to desired page location.

Select Restore image to cancel deletions, extractions and moving. (Found on far right of image controls)

See below

VIII. Appendix

A. Creating automated workflows.

An automated workflow is defined as a process to archive documents that does not require a manual indexing operation. Automated workflows can significantly reduce the cost of processing documents. The most common automated workflow would use bar code recognition or zone OCR to gather specific data that can be used as "keys" to validate against a database. Other techniques, using vFILER, can be used to perform a similar process. For example, if the file name of a captured document contained a useful "key", vFILER could be designed to use the Original Filename as a "key". In addition, the Original Filename could be "parsed" to use only a portion of the file name. This procedure could be used with other variables such as email subject, email From or To or document Title. Another example of an automated flow would be for image conversions. vFILER can be designed to capture documents and retain as variables the parent folder and/or the grandparent folder. Those variables can then be used for other vFILER components such as Publish to Folder or Publish to Database.

When using zone OCR, Bar Codes or Original File Name to automatically "load" the key into the Indexer, the procedure is to "drag" the appropriate variable (e.g. Bar Code 00) into the Key Definition tab that is associated with a particular key within Key Wizard. See below.
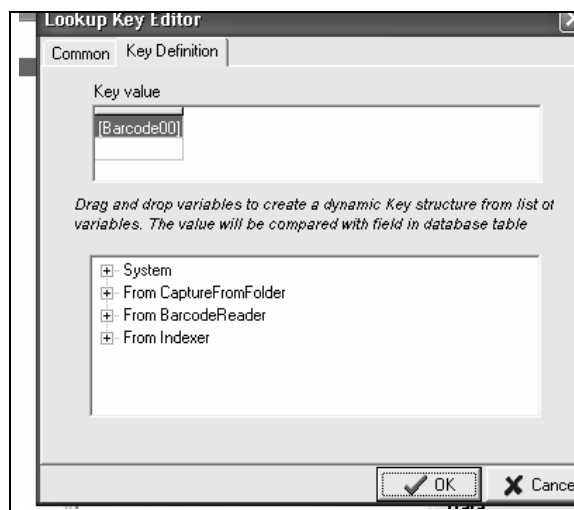
B. install folders (work area) definitions and functions.

The following folders will be created as a result of launching the setup program under the path C:\Work area and demodata.

Captured, Databases, Docs, Exports, Lists, Misc, My Input, My Output, Templates, Workflows.

The following files will be created as a result of launching the setup program under the path C:\Work area and demodata.

DPLA.exe, ISED.dll, PDRwin, SoftekBarcode.dll

The purpose of each folder is as follows:

Captured: When a file has been captured by the Captured from Folder or Capture from Email component, the "source" file is retained or deleted as a function of the switch

setting in Capture from Folder (Production mode will delete, Design mode will retain), the file is placed in the Captured folder. This becomes "work in process".

Two files are created for each file captured. One with an extension .dat, and one with an extension .xml. The .dat file contains the image, and the .xml contains data related to the image. The image file can be opened by using the "open with" option and using a TIF viewer for TIF images or Adobe reader for pdf images. The .xml file can be opened with Notepad or an xml editor. Files within the Captured folder can be cleared using the CLEAR command by entering the password "CLEAR JOBS" or deleted through explorer. The files within the Captured folder are named with a unique name starting with the workflow name. Therefore, images captured into the Captured folder can be exported out of "work in process" by workflow name. Experienced users can do so by using the DOS command rename. Steps: from Start menu, select Run. From Run, enter cmd. The DOS command prompt window should appear. Enter cd\ (return to root). Enter cd work area* (C:\work area and demodata path should appear). Enter cd cap*. (the subfolder "captured" should appear). Enter dir to see contents of the Captured folder. For pdf workflows, enter rename {"first few characters of the unique file name"*.dat *.pdf . (all .dat files, for that workflow, will be changed to the .pdf extension. For TIF workflows, enter rename {"first few characters of unique file name"*.dat *.TIF. (all .dat files, for that workflow, will be changed to the .TIF extension. You can now use "cut and paste" to export the native files to any desired location.

Use the del command to delete the .xml files from the Captured folder. (del {"first few characters of the unique file name"*.xml.)

Databases: This folder contains several Access (.mdb) files used for the sample workflows. The Wholesale Distribution database, in particular, is useful to see how tables can be cross referenced to acquire indexing data.

Docs: This folder contains the "The Perfect   " users' guide. Print, read and use the manual to become familiar with the sample workflows and processes.

Misc: This folder contains various "work" files; such as, the caching file when Design mode is selected.

My Input: This folder contains "source" images used by the   workflows. This "simulates" the folder to which a stand alone scanner or MFP is "mapped" to for "send to file".

My Output: This folder contains the "published" files used by the   workflows. This "simulates" the Repository used during actual production work.

Workflows: This folder contains the   workflows.

The purpose of each file is as follows:

DPLA.exe- This utility is used to create and manage .xml "lists" (used for the entry mode-Pull down lists). It can also be launched within vFILER when using the entry mode-Pull down lists).

 .exe- This is the full version name of the application program.

iSED.dll- This utility is used during the Convert to PDF component.

PDRwin- This is the "client" retrieval program that contains both the Database Document Retrieval (DDR) and the Indexed Document Retrieval (IDR) programs.

SoftekBarcode.dll- This is the "nag" version of the optional third party bar code recognition software.